VPDES PERMIT FACT SHEET

This document gives pertinent information concerning the reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) permit listed below. This permit is being processed as a Minor, Industrial Permit. The effluent limitations contained in this permit will maintain the Water Quality Standards (WQS) of 9VAC25-260 et seq. Lake Packing Co., Inc. cans hominy and herring roe for distribution. The discharge is comprised of cooling water from the cooking retorts and reject (brine) water from the reverse osmosis unit. Process wastewater from the canning operation is land applied under a separate Virginia Pollutant Abatement Permit (Permit No. VPA01406), which is also issued by the DEQ Piedmont Regional Office. This permit action consists of updating permit special conditions and re-evaluating effluent limitations.

1. Facility Name: Lake Packing Co., Inc.

   Facility & Mailing Address: 755 Lake Landing Drive
   Lottsburg, Virginia 22511

   SIC Code: 2033 (Fruit and Vegetable Canning)
   2091 (Canned and Cured Fish and Seafoods)

2. Permit No. VA0089231 Existing Permit Expiration Date: 7/9/2011

3. Owner: Lake Packing Co., Inc.
   Owner Contact: S. Lake Cowart, Jr.
   Title: President
   Telephone No.: (804) 529-6101

4. Application Complete Date: 7/8/2011
   DEQ Regional Office: Piedmont Regional Office
   Permit Drafted By: Andrew Hammond Date: 06/13/11, 11/07/11, 04/24/12 05/03/12, 05/15/12, 05/23/12
   Reviewed By: Jeremy Kazio Date: 10/12/11
   Curt Linderman Date: 04/10/12, 05/03/12

5. Receiving Stream Name: Coan River
   River Mile: 1ACOA002.86
   Basin: Potomac River
   Subbasin: Potomac River
   Section: 1
   Class: II
   Special Standards: a

7-Day, 10-Year Low Flow (7Q10):	N/A	1-Day, 10-Year Low Flow (1Q10):	N/A
7-Day, 10-Year High Flow:	N/A	1-Day, 10-Year High Flow:	N/A
30-Day, 5-Year Low Flow (30Q5):	N/A	Harmonic Mean Flow (HM):	N/A
30-Day, 10-Year Low Flow (30Q10):	N/A		

   Tidal? Yes On 303(d) list? Yes

   See **Attachment A** for flow frequency analysis memo. Please note that the cited river mile (1ACOA002.86) has been updated from the 2006 permit cycle (1ACOA003.04). This change reflects the as-built location of the facility's submerged diffuser cited in Section 9 of this fact sheet.

6. Operator License Requirements: None required.

7. Reliability Class: Not applicable.

8. Permit Characterization:

(**X**) Private ( ) Federal ( ) State ( ) POTW

( ) Possible Interstate Effect ( ) Interim Limits in Other Document (attach to Fact Sheet)

9. See **Attachment B** for facility flow diagram.

Table 1. Discharge Description

Outfall Number	Discharge Source	Treatment	Maximum 30-Day Average Flow
001	Cooling Water & Reject Reverse Osmosis Water [Source Water: On-site Groundwater Wells]	No treatment provided for this outfall	29,280 gpd

This facility discharges to the Coan River via a submerged diffuser. Diffuser as-built information is as follows:

Installation date: 6/4/1996
Diameter of diffuser: 6 inches
Length of diffuser: 20 feet
Depth of diffuser: 5.5 feet (average depth)
Number of ports: 120
Diameter of ports: 1-1/4 inches

See **Attachment C** for submerged diffuser as-built diagram and CORMIX2 diffuser modeling results. It is noted that the CORMIX2 diffuser modeling input data varies from the as-built diffuser information provided. However, remodeling of the submerged diffuser discharge to establish new tidal dilution ratios was not performed for this permit reissuance.

10. Sewage Sludge Use or Disposal: Not applicable as this facility does not generate sewage sludge.

11. Discharge Location Description: This facility discharges to the Coan River.
Topographic Map Name: Heathsville, Virginia
Topographic Map Number: 145B

See **Attachment D** for topographic map.

12. Material Storage:
Fuel oil is stored on-site and is used to fire the facility's boilers. The fuel oil is stored in a 12,000 gallon aboveground storage tank, which is located in an enclosed area.

13. Ambient Water Quality Information:
Water Quality data from monitoring station 1ACOA001.44 were used in this permit reissuance for toxic pollutant limitation evaluations. Monitoring station 1ACOA001.44 is located on the Coan River at the end of State Route 614 (Lake Road), approximately 1.42 miles downstream of the discharge.

See **Attachment A** for monitoring station 1ACOA001.44 stream data.

14. Antidegradation Review & Comments:

Tier: 1 _____ 2 __**X**__ 3 _____

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The antidegradation review begins with a Tier determination. The Coan River has historically been considered a Tier 2 water and antidegradation was applied to the VPDES permit at the time of issuance. Modeling subsequently indicated that "the discharge of conventional pollutants from the proposed discharge has no calculatable effect on the dissolved oxygen level of the Coan River" (Ren, 1996). In addition, a review of the water quality data at monitoring station 1ACOA001.44 shows no pH violations and only 5 dissolved oxygen violations. Although the Coan River is impaired for the Aquatic Life Use, the impairment is based on the entire Potomac Mesohaline estuary and is not a specific indication of local water quality conditions. Therefore, the Tier 2 determination has been continued for this permit reissuance.

15. Site Inspection: Performed By: Mike Dare & Andrew Hammond
Date: February 11, 2011

See **Attachment E** for site inspection report.

16. Effluent Screening & Limitation Development:

See **Attachment F** for effluent data submitted on the monthly Discharge Monitoring Reports (DMRs).

See **Attachment G** for a summary of the water quality criteria monitoring data submitted with the permit reissuance application.

If it is determined that a specific pollutant cited in the Virginia Water Quality Standards (9 VAC 25-260 et seq.) exists in a facility's effluent, a reasonable potential analysis is required in order to determine if the facility may violate WQS. This evaluation begins by determining the maximum allowable pollutant concentrations that can be discharged by a specific facility which will maintain the acute and chronic criteria contained in the WQS within the receiving stream (called "wasteload allocations" or WLA's). The WLA's are calculated using a DEQ-created Excel spreadsheet called MSTRANTI, which requires inputs representing critical data for effluent and stream flows and quality. The STATS computer application is then utilized to determine if the identified pollutant has the potential to exceed either the acute or chronic WLA's on a long term basis by calculating the expected long-term effluent distribution of the facility, then comparing the 97th percentile of that distribution to the pollutant's lowest calculated wasteload allocation. If a limitation is needed, STATS will also calculate that limitation based on EPA guidelines for the control of toxic pollutants. Lastly, the expected value of the pollutant is also compared to applicable human health water quality standards.

See **Attachment H** for the evaluations of the pollutants of concern. Included in Attachment H are the MSTRANTI printout and STATS analyses.

Table 2. Basis of Effluent Limitations

EFFLUENT CHARACTERISTICS	BASIS FOR LIMITS	DISCHARGE LIMITATIONS			
		MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM
001 – Flow	NA	NL	NA	NA	NL
002 – pH	1	NA	NA	6.0 s.u.	9.0 s.u.
004 – Total Suspended Solids (TSS)	2	NL	NA	NA	NL
007 – Dissolved Oxygen (DO)	1, 3	NA	NA	5.0 mg/L	NA
080 – Temperature	2	NL	NA	NA	NL
159 – $cBOD_5$	3	25 mg/L 2800 g/d	NA	NA	50 mg/L 5500 g/d

1. Water Quality Standards (9 VAC 25-260 et seq.)
2. Best Engineering Judgment (BEJ)
3. Regional Tidal Model – 1996

pH (002): A pH limitation of 6.0 to 9.0 standard units is assigned to all discharges into Class II Estuarine Waters in accordance with the Water Quality Standards (WQS), 9 VAC 25-260-50.

TSS (004): No limitation is established; however, monitoring and reporting are required based upon best engineering judgment. This facility was included in the annual aggregate total suspended solids wasteload allocation for the POTMH_VA segment in the EPA approved Chesapeake Bay TMDL. Therefore, permit staff recommends continued quarterly monitoring and reporting to aid in future water quality evaluations.

DO (007): This limitation was established by utilizing the Regional Tidal Model to evaluate the impact of the discharge on the water quality of the Coan River. See the stream sanitation analysis memo in **Attachment I** for additional information. A minimum daily DO concentration limit of 5.0 mg/L is expected to meet the DO water quality criteria of 9VAC25-260-50 for Class II waters.

$cBOD_5$ (159): This limitation was established by utilizing the Regional Tidal Model to evaluate the impact of the discharge on the water quality of the Coan River. See the stream sanitation analysis memo in **Attachment I** for additional information. The $cBOD_5$ loading limitations have been revised to be expressed in whole numbers in accordance with Guidance Memorandum (GM) 06-2016. The quantification level (QL) for $cBOD_5$ has been established in accordance with recently adopted VPDES General Permit regulations.

Temperature (080): No limitation is established; however, monitoring and reporting are required based on best engineering judgment. According to 9 VAC 25-260-60, any rise above natural temperature shall not exceed 3°C. In addition, 9 VAC 25-260-70 indicates that the maximum hourly temperature change shall not exceed 2°C. To verify compliance with the WQS, the maximum temperature (34.3°C) reported on the quarterly DMRs and the minimum temperature (0.30°C) recorded at stream monitoring station 1ACOA001.44 were utilized for the evaluation. An acute tidal dilution (mixing) ratio of 60:1, established in accordance with in **Attachment C**, was also used for the evaluation.

$$\text{Mixed Temperature} = \frac{34.4°C \times 1\ MGD + 0.30°C \times 59\ MGD}{60\ MGD} = 0.87°C$$

$$\text{Delta Temperature} = 0.87°C - 0.30°C = 0.57°C$$

As shown in the conservative evaluation above, it is anticipated that the natural temperature of the Coan River will not rise greater than 3°C and that the maximum hourly temperature change will not exceed 2°C. Permit staff recommends continued quarterly monitoring and reporting to aid in future evaluations.

Other Parameters: The permittee reported a detectable concentration (0.20 mg/L) for ammonia as nitrogen. In accordance with Guidance Memorandum (GM) 00-2011, the acute and chronic wasteload allocations from MSTRANTI were entered into STATS along with the reported datum. A reasonable potential analysis was performed (see **Attachment H**) and additional limitations are not needed. It is noted that ammonia as nitrogen does not have an applicable human health water quality standard for purposes of further parameter evaluation.

The permittee reported an *enterococci* bacteria count of 21 CFU/100 mL. According to 9 VAC 25-260-170.A *enterococci* bacteria shall not exceed a monthly geometric mean of 35 CFU/100 mL in saltwater. It is anticipated that the discharge will not cause nor contribute to violations of the WQS based upon the reported bacteria count. Therefore, an *enterococci* limitation has not been included in the 2012 permit.

All other parameters were reported below DEQ required quantification levels and therefore, considered absent for the purposes of this evaluation.

17. Antibacksliding Statement:
All limitations in the proposed permit are the same or more stringent than the limitations in the 2006 permit.

18. Compliance Schedules: Not applicable.

19. Special Conditions:

a. Part I.B.1 – Notification Levels
Rationale: Required by VPDES Permit Regulation, 9VAC25-31-200 A for all manufacturing, commercial mining, and silvicultural discharges.

b. Part I.B.2 – Materials Handling/Storage
Rationale: 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia § 62.1-44.16 and § 62.1-44.17 authorizes the Board to regulate the discharge of industrial waste or other waste.

c. Part I.B.3 – Compliance Reporting
Rationale: Authorized by VPDES Permit Regulation, 9VAC25-31-190 J.4 and 220 I. This condition is necessary when pollutants are monitored by the permittee and a maximum level of quantification and/or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values.

d. Part I.B.4 – Operations and Maintenance Manual Requirement
Rationale: Required by Code of Virginia § 62.1-44.16; VPDES Permit Regulation, 9VAC25-31-190 E, and 40 CFR 122.41(e). These require proper operation and maintenance of the permitted facility. Compliance with an approved O&M manual ensures this.

e. Part I.B.5 – Closure Plan
Rationale: Code of Virginia § 62.1-44.16 of the State Water Control Law. This condition establishes the requirement to submit a closure plan for the wastewater treatment facility if the treatment facility is being replaced or is expected to close.

f. Part I.B.6 – Water Quality Criteria Reopener
Rationale: VPDES Permit Regulation, 9VAC25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of the water quality standards.

g. Part I.B.7 – Reopeners
Rationale: Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The re-opener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other wasteload allocation prepared under section 303 of the Act. 9VAC25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion, or upgrade. 9VAC25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

h. Part II – Conditions Applicable to All VPDES Permits
Rationale: VPDES Permit Regulation, 9VAC25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed.

20. NPDES Permit Rating Work Sheet: Total Score 38 (See **Attachment J**)

21. Changes to the Permit:

<table>
<tr><td colspan="6">Permit Cover Page Changes:</td></tr>
<tr><td colspan="3">Item</td><td colspan="3">Rationale</td></tr>
<tr><td colspan="3">Initial paragraph</td><td colspan="3">Updated language to reflect GM 10-2003 (January 27, 2010 VPDES Permit Manual).</td></tr>
<tr><td colspan="3">Signatory authority</td><td colspan="3">Updated to reflect DEQ Policy 2-09.</td></tr>
<tr><td colspan="6">Part I.A. Changes:</td></tr>
<tr><td rowspan="2">Parameter Changed</td><td colspan="2">Discharge Limitations Changed</td><td colspan="2">Monitoring Requirements Changed</td><td rowspan="2">Rationale</td></tr>
<tr><td>From</td><td>To</td><td>From</td><td>To</td></tr>
<tr><td>Flow</td><td colspan="2">No Change</td><td>1/3 Months</td><td>1 per 3 Months</td><td>Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td>pH</td><td colspan="2">No Change</td><td>1/3 Months</td><td>1 per 3 Months</td><td>Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td>TSS</td><td>NL kg/d</td><td>NL g/d</td><td>1/3 Months</td><td>1 per 3 Months</td><td>Updated loading reporting units to provide consistency with other monitored parameters. Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td>DO</td><td colspan="2">No Change</td><td>1/3 Months</td><td>1 per 3 Months</td><td>Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td>Temperature</td><td colspan="2">No Change</td><td>1/3 Months</td><td>1 per 3 Months</td><td>Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td rowspan="2">$cBOD_5$</td><td>2.8 kg/d</td><td>2800 g/d</td><td rowspan="2">1/3 Months</td><td rowspan="2">1 per 3 Months</td><td rowspan="2">Permit loading limitations revised to be expressed in whole numbers per GM 06-2016. Updated monitoring frequency for clarity purposes.</td></tr>
<tr><td>5.5 kg/d</td><td>5500 g/d</td></tr>
</table>

From	To	Rationale
I.A.1	I.A.1	Updated definitional footnote for "NL" and "NA." Included definitional footnote for "24 HC."
-----	I.A.1.(a)	Footnote added to reflect changes in agency guidance per GM 06-2016 and for clarity purposes.
-----	I.A.1.(b)	Footnote added to further clarify "1 per 3 Months" monitoring frequency requirements.
I.A.2	I.A.2	No change.
I.A.3	I.A.3	No change.
Part I.B Changes:		
From	**To**	**Rationale**
I.B.1	I.B.1	Part I.B.1.a.2 corrected from "1 µg/L" to "1.0 mg/L" for antimony. Part I.B.1.b.2 updated from "1 mg/L" to "1.0 mg/L" for antimony. Revisions reflect changes in agency guidance per GM 06-2016.
I.B.2	I.B.2	Updated language to reflect GM 10-2003.
I.B.3	I.B.3	Updated language to reflect GM 10-2003. Revised the QL for $cBOD_5$ to reflect recently adopted VPDES General Permit regulations. Removed the QL for TSS because it is a monitored-only parameter with no limitation. Language further revised to clarify monthly average reporting of quarterly monitored parameters.
I.B.4	I.B.4	Updated language to reflect current agency guidance (OWP&CA email dated 4/3/2012).
I.B.5	I.B.7.a	Special condition language has been incorporated into a new permit special condition (Part I.B.7).
I.B.6	I.B.5	Updated language to reflect GM 10-2003. Language further revised according to regional procedure.
I.B.7	I.B.7.c	Special condition language has been incorporated into a new permit special condition (Part I.B.7). Updated language to reflect GM 07-2008, Amendment No. 2.
I.B.8	I.B.6	Renumbered, no change.
-----	I.B.7.b	New, added special condition language in accordance with GM 07-2008, Amendment No. 2.
-----	I.B.8	New, added special condition language in accordance with DEQ-PRO staff decision dated 6/29/2010.
Part II Changes:		
From	**To**	**Rationale**
-----	II.A.4	New, added special condition language to reflect change in laboratory accreditation requirements.

Changes to Draft Permit in Response to Owner Comments:		
From	**To**	**Rationale**
I.B.3	I.B.3	Language further revised to clarify daily maximum reporting of quarterly monitored parameters in response to owner's comment.
I.B.8	Removed	Concept Engineering Report (CER) special condition language removed from the permit in response to owner's comment. Please note that wastewater treatment works construction, expansion, and/or modification may potentially require reopening the VPDES permit.

22. Variances/Alternate Limits or Conditions:
The permittee was granted an EPA Form 2C sampling and reporting waiver for chemical oxygen demand, total organic carbon and winter temperature. See **Attachment K** for additional information and discussion.

23. Public Notice Information required by 9 VAC 25-31-280 B:

Comment Period:	State Date:	05/30/12
	End Date:	06/29/12
	Published Dates:	05/30/12 & 06/06/12
	Publishing Newspaper:	*Northumberland Echo*

All pertinent information is on file and may be inspected or copied by contacting Andrew Hammond at:

Virginia Department of Environmental Quality (DEQ)
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

Phone: 804-527-5048
Fax: 804-527-5106
Email: Andrew.Hammond@deq.virginia.gov

DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit. The public may review the draft permit and application at the DEQ Piedmont Regional Office by appointment or may request copies of the documents from the contact person listed above.

Public Notice Comments: No comments were received during the public comment period.

24. 303(d) Listed Segments (TMDL):
This facility discharges directly to the tidal Coan River in the Chesapeake Bay watershed in the Potomac River mesohaline estuary (POTMH_VA). The receiving stream has been addressed in the Chesapeake Bay TMDL, approved by EPA on December 29, 2010. The TMDL addresses dissolved oxygen (DO), chlorophyll a, and submerged aquatic vegetation (SAV) impairments in the main stem Chesapeake Bay and its tidal tributaries by establishing non-point source load allocations (LAs) and point-source waste load allocations (WLAs) for Total Nitrogen (TN), Total Phosphorus (TP) and Total Suspended Solids (TSS) to meet applicable Virginia Water Quality Standards contained in 9VAC25-260-185.

Implementation of the Chesapeake Bay TDML is currently accomplished in accordance with the Commonwealth of Virginia's Phase I Watershed Implementation Plan (WIP), approved by EPA on December 29, 2010. The approved WIP recognizes the "General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed of Virginia" (9VAC25-820) as controlling the nutrient allocations for non-significant Chesapeake Bay dischargers. The approved WIP states that for non-significant Municipal and Industrial facilities, nutrient WLAs are to be consistent with Code of Virginia procedures, which set baseline WLAs to 2005 permitted design capacity or equivalent (for industrial facilities) nutrient load levels. In accordance with the WIP, TN and TP WLAs for non-significant facilities are considered aggregate allocations and will not be included in

individual permits. The WIP also considers TSS WLAs for non-significant facilities to be aggregate allocations, but TSS limits are to be included in individual VPDES permits in conformance with the technology-based requirements of the Clean Water Act. However, the WIP recognizes that so long as the aggregated TSS permitted loads for all dischargers is less than the aggregated TSS load in the WIP, the individual permit will be consistent with the TMDL.

40 CFR 122.44(d)(1)(vii)(B) requires permits to be written with effluent limits necessary to meet water quality standards and to be consistent with the assumptions and requirements of applicable WLAs. This facility is classified as a non-significant Chesapeake Bay discharger because it is a permitted design capacity flow, or equivalent load, of less than 100,000 gallons per day into tidal waters. This facility has not made application for a new or expanded discharge since 2005. It is therefore covered by rule under the 9VAC25-820 regulation. In accordance with the WIP, TN and TP load limits are not included in this individual permit, but are consistent with the TMDL because the current nutrient loads are in conformance with the facility's 2005 permitted design capacity, or equivalent, loads. This facility is not subject to any technology-based TSS requirements of the Clean Water Act; therefore, a TSS limitation has not been included in the permit. As long as the aggregate TSS loading (for all non-significant dischargers) is less than the aggregate TSS loading contained in the WIP the permit is considered to be consistent with the Chesapeake Bay TMDL. In addition, the individual permit has limits of 25 mg/L ($cBOD_5$) and 5.0 mg/L (DO). Given these limits, this facility can neither cause nor contribute to an observed violation of the standards, and is consistent with the TMDL.

The stream segment receiving the effluent is also listed as impaired for not supporting the Shellfishing Use on the 2010 303(d) list. Portions of the receiving stream have been listed as condemned shellfish areas by the Virginia Department of Health – Division of Shellfish Sanitation for violating the in-stream fecal coliform WQS. The permittee reported a fecal coliform count of <2 CFU/100 mL. Consequently, the discharge is not considered to be a source of fecal coliform; therefore, an effluent limitation has not been included in the 2012 permit. It is anticipated that the discharge will not cause nor contribute to this impairment.

Additionally, the receiving stream is listed as impaired for not supporting the Fish Consumption Use on the 2010 303(d) list. The Fish Consumption Use is impaired due to a Virginia Department of Health Fish Consumption Advisory for PCBs; in addition, benzo(a)anthracene and chrysene are considered non-impairing observed effects due to fish screening value exceedances. EPA approved the TMDL for PCBs in the tidal Potomac River watershed on 10/31/2007. The TMDL does not contain a WLA for this discharge. The permittee reported a total PCB concentration of <3.57 µg/L, a benzo(a)anthracene concentration of <5.0 µg/L, and a chrysene concentration of <5.0 µg/L. These reported concentrations are less than DEQ established and/or required QLs. Consequently, the discharge is not considered to be a source of PCBs, benzo(a)anthracene, or chrysene; therefore, effluent limitations have not been included in the 2012 permit. It is anticipated that the discharge will not cause nor contribute to this impairment.

25. Additional Comments:

Previous Board Action:

- None.

Staff Comments:

- The original application was received on 1/7/2011. Additional information was received on 5/19/2011, 6/6/2011, and 7/8/2011. The 2006 permit has not been administratively continued.

- The permittee has not yet applied for e-DMR. The permittee was notified of our intent for e-DMR to be used with the next permit action by reissuance reminder letter dated 10/12/2010.

- The permittee is not currently a Virginia Environmental Excellence Program (VEEP) participant.

- The annual permit maintenance fee was deposited on 9/2/2011.

- This permit reissuance is considered to be non-controversial. The staff believes that the proposed effluent limitations will maintain the Water Quality Standards adopted by the SWCB.

- The permittee was issued a Warning Letter on 6/2/2008 and 5/31/2011 for non-submission of quarterly DMR data.

- Since the facility does not operate from mid-October through mid-March, the discharge is considered to be seasonal. Consequently, the facility does not qualify for consideration of reduced monitoring in accordance with GM 00-2011.

- This facility is subject to the requirements of 9VAC25-151, General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity. The permittee currently holds a "No Exposure Certification" for exclusion from VPDES storm water permitting which is effective through 5/18/2016. See **Attachment L** for additional information and discussion.

- As shown in the total nitrogen (TN) and total phosphorus (TP) loading calculations below, this existing industrial facility is not considered a significant discharger to the Chesapeake Bay as defined in 9 VAC 25-720-10 (equivalent loadings of 5,700 lb/yr TN or greater and 760 lb/yr TP or greater).

  TN = 0.50 mg/L TN x 0.03 MGD x 8.34 (conversion factor) x 365 days/yr = 46 lb/yr TN

  TP = 0.28 mg/L TP x 0.03 MGD x 8.34 (conversion factor) x 365 days/yr = 26 lb/yr TP

  Additionally, this facility has not undergone an expansion and/or upgrade (i.e. capital improvements to its wastewater treatment system to remove nitrogen and/or phosphorus) requiring the submittal of a Concept Engineering Report. As a result, Lake Packing Company has not been required to register for coverage under the Watershed General Permit, 9 VAC 25-820-10 et seq. However, the facility is authorized by rule to discharge TN and TP in the Chesapeake Bay watershed under 9VAC25-820-70.A.2.

- In accordance with the Code of Virginia § 62.1-44.15:01.A.2, 9VAC25-31-290.G.2 and GM 11-2005, the Executive Director of the Northern Neck Planning District Commission, the Northumberland County Administrator, and the Chairman of the Northumberland County Board of Supervisors were notified of the public comment period and sent a copy of the public notice by letters dated 5/25/2012.

EPA Comments:

- EPA has waived the right to comment and/or object to the adequacy of this permit.

VDH-ODW Comments:

- The Virginia Department of Health – Office of Drinking Water reviewed the permit application and had no objections. They have indicated that there are no public water supply intakes within 15 miles downstream of the discharge.

VDH-DSS Comments:

- The Virginia Department of Heath – Division of Shellfish Sanitation reviewed the application and had no objections. They have indicated that the discharge is located in approved shellfish growing waters; however, the discharge as described will not require a change in classification.

Owner Comments:

- Changes to the draft permit in response to owner comments have been documented in Section 21 of this fact sheet. Owner comments and DEQ staff responses are included in **Attachment M**.

Planning Conformance Statement:

- On 4/30/2012 the Water Resources Development Staff indicated that the discharge is in conformance with the existing planning documents for the area.

26. Summary of Attachments:

Attachment A	Flow Frequency Analysis Memo
Attachment B	Facility Flow Diagram
Attachment C	CORMIX2 Diffuser Modeling Results | Diffuser As-built Information
Attachment D	Topographic Map
Attachment E	Site Inspection Report
Attachment F	Effluent DMR Data
Attachment G	Water Quality Criteria Monitoring Summary
Attachment H	MSTRANTI & STATS Analyses
Attachment I	Stream Sanitation Analysis Memo
Attachment J	NPDES Permit Rating Work Sheet
Attachment K	EPA Form 2C Sampling & Reporting Waiver
Attachment L	Industrial Storm Water No Exposure Certification
Attachment M	Owner Comments & DEQ Staff Responses

Attachment A

Flow Frequency Analysis Memo

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office
4949-A Cox Road Glen Allen, Virginia 23060

SUBJECT: Flow Frequency Determination / 303(d) Status
Lake Packing Company, Inc. – VA0089231

TO: Drew Hammond, P.E.

FROM: Jennifer Palmore, P.G.

DATE: January 19, 2011
UPDATED: April 23, 2012

COPIES: File

The Lake Packing Company facility discharges to the Coan River in Lake, VA, which is located in Northumberland County. The outfall is located at rivermile 1ACOA002.86. Flow frequencies have been requested at this site for use by the permit writer in developing effluent limitations for the VPDES permit.

The Coan River is tidally influenced at the discharge point. Flow frequencies cannot be determined for tidal waters, therefore the previously-determined dilution ratios (Phillips, 1995) should be used to evaluate the effluent's impact on the water body. The Virginia Water Quality Standards classify the Coan River as an estuarine water; therefore the aquatic life saltwater criteria should be applied.

During the 2010 305(b)/303(d) Water Quality Assessment, the Coan River at the discharge point was considered a Category 5D water ("The Water Quality Standard is not attained where TMDLs for a pollutant(s) have been developed but one or more pollutants are still causing impairment requiring additional TMDL development.") The applicable fact sheets are attached. The Aquatic Life Use is impaired due to inadequate submerged aquatic vegetation (SAV) in the Potomac Mesohaline estuary. The Fish Consumption Use is impaired due to the VDH Fish Consumption Advisory for PCBs; in addition, benzo(a)anthracene and chrysene are considered non-impairing observed effects due to fish tissue screening value exceedances. The Shellfishing Use is impaired due to a VDH shellfish condemnation. The Wildlife Use is fully supporting and the Recreation Use was not assessed.

As mentioned above, the Coan River was addressed in the TMDL for PCBs in the tidal Potomac River watershed, which was approved by the EPA on 10/31/2007 and by the SWCB on 4/11/2008. The Coan River requires a 53.5% reduction in annual PCB loads. Lake Packing Company was not addressed in the TMDL.

The facility was also included in the Chesapeake Bay TMDL, which addressed dissolved oxygen, chlorophyll a, and SAV impairments in the mainstem Bay and its tidal tributaries. The TMDL was approved by the EPA on 12/29/2010. The discharge was included in the aggregated total nitrogen, total phosphorus, and total suspended solids (TSS) wasteload allocations for non-significant wastewater dischargers in the Virginia portion of the Potomac River mesohaline estuary (POTMH_VA). The nutrient allocations are administered through the Watershed Nutrient General Permit; the TSS allocations are considered aggregated and facilities with technology-based TSS limits are considered to be in conformance with the TMDL.

Water quality data from monitoring station 1ACOA001.44 is attached. The station is located on the Coan River at the end of Route 614 and is approximately 1.42 miles downstream of the discharge.

Flow Frequency Determination
Lake Packing Company – VA0089231
January 19, 2011

The Coan River has historically been considered a Tier 2 water and antidegradation was applied to the permit at the time of issuance. Modeling subsequently indicated that "the discharge of conventional pollutants from the proposed discharge has no calculatable effect on the dissolved oxygen level of the Coan River (Ren, 1996). In addition, review of the water quality data at station 1ACOA001.44 shows no pH violations and only 5 dissolved oxygen violations. Although the Coan River is impaired for the Aquatic Life Use, the impairment is based on the entire Potomac Mesohaline estuary and is not a specific indication of local water quality conditions. The Tier 2 determination should be continued.

If you have any questions concerning this analysis, please let me know.

2010 Fact Sheets for 303(d) Waters

RIVER BASIN: Potomac River & Shenandoah River Basins **HYDROLOGIC UNIT:** 02070011

STREAM NAME: **Coan River**

TMDL ID: **A34E-32-SF** **2010 IMPAIRED AREA ID:** CB-POTMH

ASSESSMENT CATEGORY: 5B **TMDL DUE DATE:** 2016

IMPAIRED SIZE: 0.2725 - Sq. Mi. **Watershed:** VAP-A34E

INITIAL LISTING: 2004

UPSTREAM LIMIT: Downstream boundary of SFC 145I, 2/23/1997

DOWNSTREAM LIMIT: Downstream condemnation boundary

Portion of VDH Notice and Description of Shellfish Condemnation Number 008-214D, 2/7/2008 not included on condemnation 145, 2/23/1997.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Shellfishing Use - Not Supporting

IMPAIRMENT: VDH Shellfish Restriction

Portion of VDH-DSS Condemnation Notice 008-214D, 2/7/2008

Headly Cove, Mill Creek and a portion of the Coan River were assessed as impaired of the Shellfish Use in 1998 because of VDH SFC 145H and 145I, 2/25/1997. During the 2004 cycle, the segments expanded and merged and are currently merged as shown on VDH SFC 008-214D, 2/7/2008. However the 12/18/2003 Coan River Shellfish TMDL report only addressed the original impairments, The closures first expanded during the 2004 cycle, therefore the TMDL for the expanded areas is due in 2016.

Note: this expansion was included in VAP-A34E-05 and VAP-A34E-32 in the 2006 cycle. During the 2008 cycle, the impairments were merged.

IMPAIRMENT SOURCE: Nonpoint Source

Nonpoint source is suspected.

RECOMMENDATION: Problem Characterization

2010 Fact Sheets for 303(d) Waters

RIVER BASIN: Potomac River & Shenandoah River Basins **HYDROLOGIC UNIT:** 02070011

STREAM NAME: **Potomac Mesohaline Embayments**

TMDL ID: **POTMH-SAV-BAY** **2010 IMPAIRED AREA ID:** CB-POTMH

ASSESSMENT CATEGORY: 5A **TMDL DUE DATE:** 2010

IMPAIRED SIZE: ~30 - Sq. Mi. **Watershed:** VAP-A31E

INITIAL LISTING: 2006

UPSTREAM LIMIT: Oligohaline/mesohaline boundary near Mathias Point Neck

DOWNSTREAM LIMIT: Mouth

The tidal portion of Virginia's Potomac tributaries which enter between the oligohaline/mesohaline boundary at Mathias Point Neck and the mouth.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Shallow Water Subuse - Not Supporting

IMPAIRMENT: Aquatic Macrophytes (SAV)

The mesohaline portion of the Potomac River failed the Submerged Aquatic Vegetation acreage standards during the 2006, 2008, and 2010 cycles.

There was insufficient information to assess the water clarity acreage.

IMPAIRMENT SOURCE: Nonpoint Source, Point Source

Tributary strategies have been developed.

RECOMMENDATION: Problem Characterization

2010 Impaired Waters (Category 4A) TMDL Approved and (Category 4B) Other Control Measures Present*

Potomac and Shenandoah River Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
A23R-02-BEN	Popes Head Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	4A			4.93	1998	2006
A23R-03-BAC	Little Rocky Run						
Recreation	Escherichia coli	4A			4.78	2008	2020
A24L-01-DO	Occoquan Reservoir						
Aquatic Life	Oxygen, Dissolved	4B		1,313.28		2002	
A25R-01-BAC	Neabsco Creek						
Recreation	Escherichia coli	4A			8.81	2002	2010
A25R-01-PCB	Giles Run						
Fish Consumption	PCB in Water Column	4A			5.92	2010	2022
A25R-02-PCB	Mills Branch						
Fish Consumption	PCB in Water Column	4A			1.71	2010	2022
A26L-01-PCB	Lake Montclair						
Fish Consumption	PCB in Fish Tissue	4A		98.03		2010	2022
A30E-01-BAC	Williams Creek						
Recreation	Enterococcus	4A	0.122			2010	2022
A30E-01-PCB	Coan River, Monroe Creek, Upper Machodoc Creek						
Fish Consumption	PCB in Fish Tissue	4A	2.560			2004	2016
	PCB in Fish Tissue	4A	3.363			2006	2018
A30E-03-SF	Upper Machodoc Creek						
Shellfishing	Fecal Coliform	4A	0.671			1998	2010
A30E-06-SF	Deep Creek						
Shellfishing	Fecal Coliform	4A	0.038			2008	2020
A30R-02-BAC	Upper Machodoc Creek						
Recreation	Fecal Coliform	4A			2.19	2004	2016
	Enterococcus	4A	0.671			2006	2018
A31E-01-SF	Rosier Creek						
Shellfishing	Fecal Coliform	4A	0.209			1998	2010
A31E-06-BAC	Mattox Creek						
Recreation	Enterococcus	4A	0.552			2006	2010
A31E-06-SF	Mattox Creek						
Shellfishing	Fecal Coliform	4A	0.186			1996	2010
A31E-07-BAC	Popes Creek						
Recreation	Enterococcus	4A	0.573			2006	2014
A31E-07-SF	Popes Creek						
Shellfishing	Fecal Coliform	4A	0.573			1998	2010
A32E-01-SF	Cold Harbor Creek						
Shellfishing	Fecal Coliform	4A	0.083			2004	2010

Station ID	Collection Date	Depth Desc	Depth	Temp Celcius	Field Ph	Do Probe	Salinity
1ACOA001.44	10/27/1992	S	0.3	14.8	8.39	9.2	15
1ACOA001.44	12/14/1992	S	0.3	6	8.23	11.1	13
1ACOA001.44	4/8/1993	S	0.3	12.6	7.7	12.4	5
1ACOA001.44	6/9/1993	S	0.3	26.2	7.79	6.5	8
1ACOA001.44	10/21/1993	S	0.3	18.9	8.02	9	15
1ACOA001.44	12/13/1993	S	0.3	4.37	7.83		
1ACOA001.44	2/16/1994	S	0.3	4.8	7.11	12.8	5
1ACOA001.44	4/6/1994	S	0.3	13.3	8.25	10.6	7
1ACOA001.44	12/15/1994	S	0.3	7.3	8.11	10.2	14.5
1ACOA001.44	2/9/1995	S	0.3	0.3	8.1	13.3	18
1ACOA001.44	5/4/1995	S	0.3	15.31	7.19	7.31	15.6
1ACOA001.44	8/9/1995	S	0.3	24.7	7.74	6.57	15.7
1ACOA001.44	11/13/1995	S	0.3	9.81	7.72	9.49	18.8
1ACOA001.44	2/21/1996	S	0.3	4.61	7.92	14.32	10.9
1ACOA001.44	5/23/1996	S	0.3	23.82	8.62	10.34	7.5
1ACOA001.44	8/20/1996	S	0.3	27.27	8.38	8.37	7.9
1ACOA001.44	11/18/1996	S	0.3	8.03	7.88	11.51	11.2
1ACOA001.44	2/12/1997	S	0.3	3.46	7.82	13.75	8.1
1ACOA001.44	5/5/1997	S	0.3	15.61	8.34	9.57	8.8
1ACOA001.44	8/25/1997	S	0.3	26.01	8.03	8.89	14.2
1ACOA001.44	10/14/1997	S	0.3	21	7.6	8.17	16.5
1ACOA001.44	12/11/1997	S	0.3	6.61	8.16	9.35	15.9
1ACOA001.44	2/11/1998	S	0.3	5.84	7.23	10.72	5.2
1ACOA001.44	4/13/1998	S	0.3	14.47	8.48	10.51	7
1ACOA001.44	6/4/1998	S	0.3	23.43	7.65	5.43	7.4
1ACOA001.44	8/13/1998	S	0.3	29.73	8.01	7.71	11.9
1ACOA001.44	10/14/1998	S	0.3	19.06	7.98	8.97	14.9
1ACOA001.44	12/9/1998	S	0.3	13.73	7.59	8.32	19.9
1ACOA001.44	2/8/1999	S	0.3	6.8	7.55	8.43	19.4
1ACOA001.44	4/12/1999	S	0.3	14.44	8.25	9.47	13.8
1ACOA001.44	6/9/1999	S	0.3	26.65	7.7	5.35	12.6
1ACOA001.44	8/11/1999	S	0.3	27.56	8.01	7.02	16.5
1ACOA001.44	10/4/1999	S	0.3	22.05	8.02	8.93	16.4
1ACOA001.44	12/28/1999	S	0.3	3.14	7.46	11.92	16.4
1ACOA001.44	2/24/2000	S	0.3	10.83	8.04	12.5	15.3
1ACOA001.44	4/25/2000	S	0.3	14.74	8.08	8.15	12.1
1ACOA001.44	5/16/2000	S	0.3	22.82	7.23	6.05	10.2
1ACOA001.44	5/16/2000	M	1	22.81	7.23	**4.76**	10.2
1ACOA001.44	5/16/2000	B	2	22.37	7.05	**4.09**	10.4
1ACOA001.44	6/7/2000	S	0.3	20.04	7.94	7.95	10.7
1ACOA001.44	8/14/2000	S	0.3	24.24	7.62	6.34	8.7
1ACOA001.44	10/11/2000	S	0.3	14.05	7.79	9.28	12.4
1ACOA001.44	12/4/2000	S	0.3	3.72	7.72	10.9	15.81
1ACOA001.44	2/15/2001	S	0.3	6.96	8.05	11.27	15.4
1ACOA001.44	4/4/2001	S	0.3	10.06	8.07	9.73	12.38
1ACOA001.44	5/15/2001	S	0.3	21.46	7.71	5.68	12.25
1ACOA001.44	5/23/2001	S	0.3	22.62	7.6	6.39	12.53
1ACOA001.44	5/31/2001	S	0.3	21.91	7.18	6.75	12.39
1ACOA001.44	6/13/2001	S	0.3	28.3	7.69	7.46	11.69
1ACOA001.44	7/17/2001	S	0.3	27.66	7.77	6.37	12.73
1ACOA001.44	9/24/2001	S	0.3	24.44	7.25	5.98	15.22

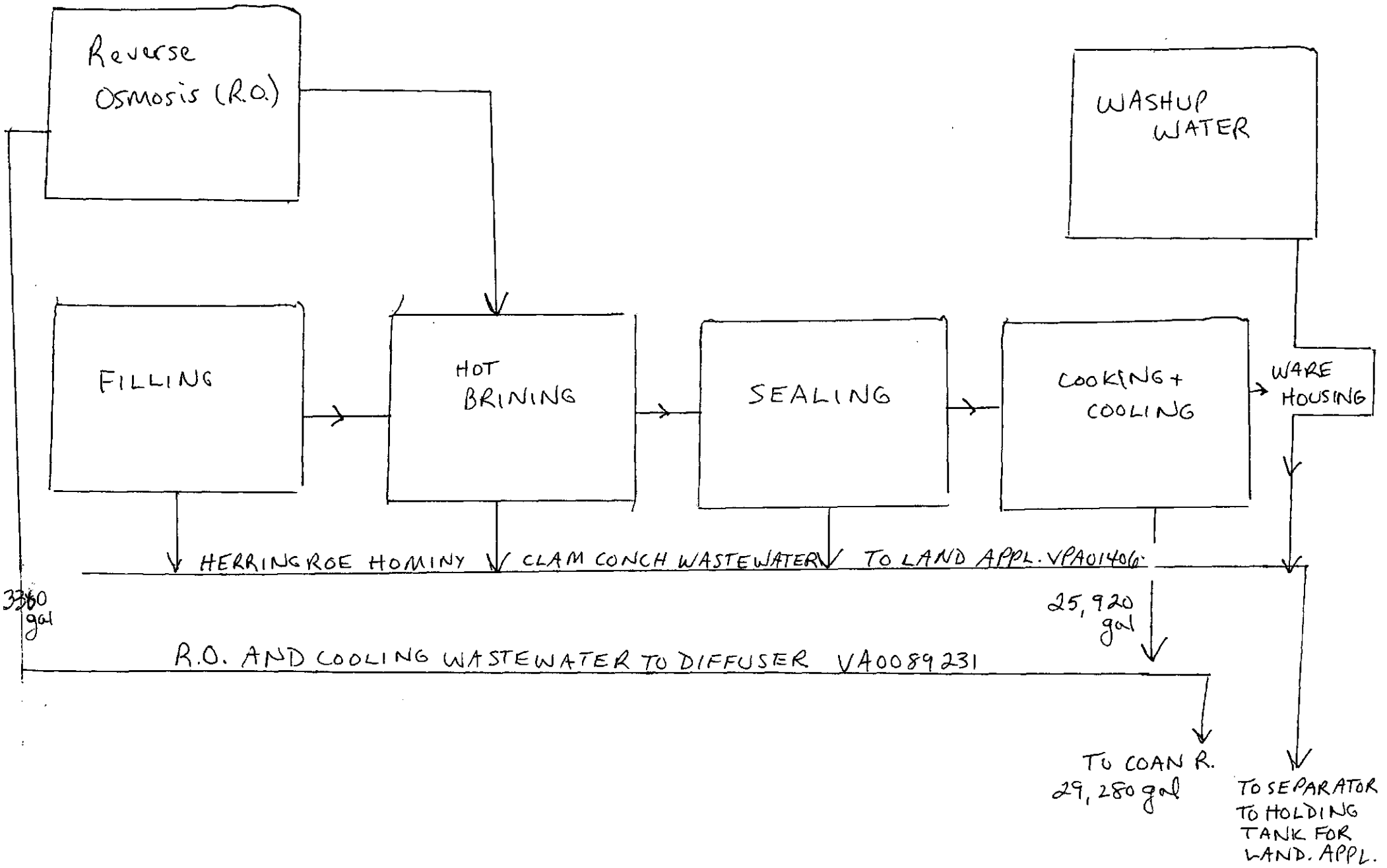
Station ID	Collection Date	Depth Desc	Depth	Temp Celcius	Field Ph	Do Probe	Salinity
1ACOA001.44	11/19/2001	S	0.3	12.35	7.24	8.28	17.4
1ACOA001.44	1/15/2002	S	0.3	5.06	7.45	11.77	18.4
1ACOA001.44	3/13/2002	S	0.3	9.97	7.15	9.74	18.7
1ACOA001.44	3/27/2002	S	0.3	11.47	7.25	9.67	18.7
1ACOA001.44	4/1/2002	S	0.3	13.8	7.78	8.38	17.54
1ACOA001.44	4/10/2002	S	0.3	15.86	7.78	8.13	16.74
1ACOA001.44	4/10/2002	S	1.4	14.59	7.95	8.84	17.43
1ACOA001.44	4/18/2002	S	0.3	22.28	7.82	8.34	16.55
1ACOA001.44	5/1/2002	S	0.3	18.49	7.04	8.23	16.33
1ACOA001.44	5/2/2002	S	0.3	18.48	7.64	7.36	15.87
1ACOA001.44	5/10/2002	S	0.3	22.54	8.04	8.26	14.49
1ACOA001.44	5/17/2002	S	0.3	21.33	7.88	8.38	15.13
1ACOA001.44	8/28/2002	S	0.3	25.45	7.55	6.41	16.87
1ACOA001.44	10/28/2002	S	0.3	14.64	7.51	9.4	18.13
1ACOA001.44	12/4/2002	S	0.3	3.24	7.93	12.2	15.87
1ACOA001.44	4/29/2003	S	0.3	18.36	8.18	10.51	7.67
1ACOA001.44	6/11/2003	S	0.3	23.33	7.9	7.19	8.31
1ACOA001.44	8/4/2003	S	0.3	27.56	7.98	6.19	9.94
1ACOA001.44	10/6/2003	S	0.3	19.24	8.05	8.99	8.94
1ACOA001.44	12/15/2003	S	0.3	5.07	8.31	11.8	8.62
1ACOA001.44	3/11/2004	S	0.3	7.82	7.81	10.79	9.02
1ACOA001.44	4/27/2004	S	0.3	16.8	7.91	8.38	9.16
1ACOA001.44	6/8/2004	S	0.3	25.47	7.44	7.25	8.57
1ACOA001.44	6/17/2004	S	0.3	26.92	8.15	7.13	9.87
1ACOA001.44	7/8/2004	S	0.3	28.9	7.88	6.19	10.53
1ACOA001.44	7/19/2004	S	0.3	28.97	8.4	8.79	10.6
1ACOA001.44	8/4/2004	S	0.3	29.36	8.28	7.82	10.8
1ACOA001.44	9/7/2004	S	0.3	24.8	8.11	8.45	9.11
1ACOA001.44	9/27/2004	S	0.3	23.5	8.46	8.76	10.16
1ACOA001.44	10/5/2004	S	0.3	21.46	8.15	7.51	9.46
1ACOA001.44	11/16/2004	S	0.3	10.03	8.33	11.68	8.25
1ACOA001.44	11/29/2004	S	0.3	10.37	8.57	11.75	9.49
1ACOA001.44	1/24/2005	S	0.3	0.78	7.98	13.82	8.01
1ACOA001.44	3/30/2005	S	0.3	11.53	8.24	12.67	8.51
1ACOA001.44	5/5/2005	S	0.3	16.23	8.4	10.72	6.86
1ACOA001.44	5/23/2005	S	0.3	20.32	8.97	10.42	8.06
1ACOA001.44	6/2/2005	S	0.3	21.5	8.4	8.94	7.54
1ACOA001.44	6/28/2005	S	0.3	28.47	8.21	7.05	9.57
1ACOA001.44	7/11/2005	S	0.3	29.97	8.63	10.97	9.82
1ACOA001.44	8/3/2005	S	0.3	30.96	8.32	8.79	10.94
1ACOA001.44	9/6/2005	S	0.3	25.44	7.86	7.51	13.22
1ACOA001.44	9/13/2005	S	0.3	26.63	8.24	7.75	13.57
1ACOA001.44	10/26/2005	S	0.3	14.34	7.77	8.95	14.55
1ACOA001.44	11/8/2005	S	0.3	15.92	8.25	9.8	13.71
1ACOA001.44	11/14/2005	S	0.3	14.54	8.23	9.9	15.18
1ACOA001.44	2/2/2006	S	0.3	6.85	8.54	12.81	11.12
1ACOA001.44	3/16/2006	S	0.3	11.5	8.6	12.6	10.55
1ACOA001.44	5/23/2006	S	0.3	19.9	8	7.6	11.5
1ACOA001.44	5/31/2006	S	0.3	27.4	8.2	8.3	12.2
1ACOA001.44	6/8/2006	S	0.1	25.2	8.2	8.2	12.8
1ACOA001.44	6/8/2006	B	3	23.8	7.5	**2.8**	12.8

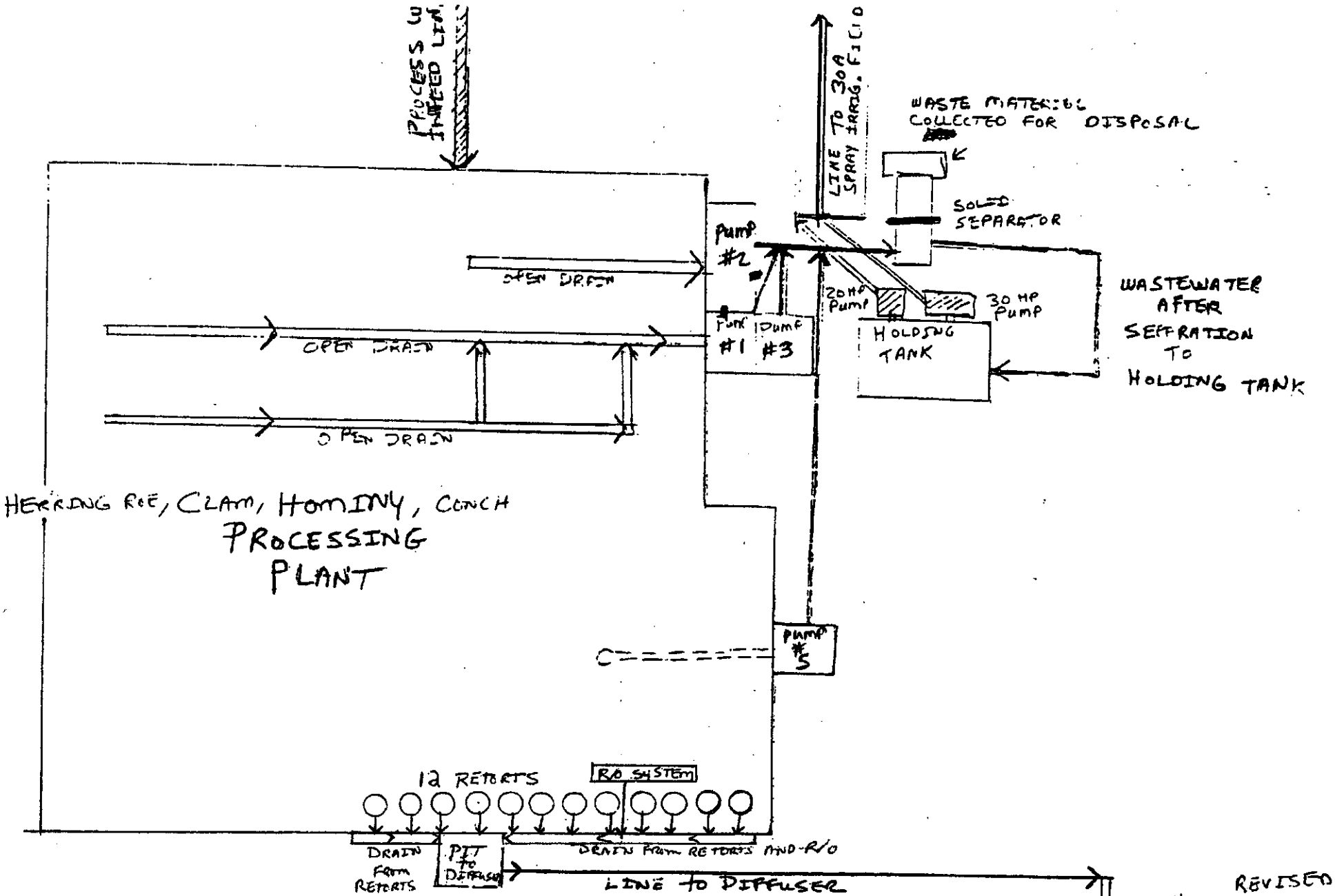
Station ID	Collection Date	Depth Desc	Depth	Temp Celcius	Field Ph	Do Probe	Salinity
1ACOA001.44	6/12/2006	S	0.1	21.9	7.9	6.6	12.9
1ACOA001.44	6/12/2006	B	2.2	21.9	7.9	6.4	12.9
1ACOA001.44	6/15/2006	S	0.1	24.9	8	9.4	12.9
1ACOA001.44	6/15/2006	B	1.1	23.3	8	9	12.8
1ACOA001.44	6/19/2006	S	0.1	26	8	7.5	13.8
1ACOA001.44	6/19/2006	B	2.1	23.9	7.5	**1.6**	13.2
1ACOA001.44	6/22/2006	S	0.3	27.4	8.1	8.2	13.9
1ACOA001.44	6/26/2006	S	0.1	26.2	7.8	6.9	12.9
1ACOA001.44	6/26/2006	B	1.9	24.5	7.4	**2.6**	15.2
1ACOA001.44	7/20/2006	S	0.3	31.7	8.4	9.1	12.5
1ACOA001.44	7/25/2006	S	0.3	28.5	8.3	8.2	12
1ACOA001.44	8/23/2006	S	0.3	29.7	8.2	8.7	13
1ACOA001.44	8/30/2006	S	0.3	28.7	8	6.3	15.9
1ACOA001.44	9/12/2006	S	0.3	22.3	7.9	7.1	14
1ACOA001.44	10/26/2006	S	0.3	12.1	8	9.8	14
1ACOA001.44	11/20/2006	S	0.3	11.2	8.2	10.9	13.3
1ACOA001.44	11/28/2006	S	0.3	10.2	8.7	14.7	8.7
1ACOA001.44	2/28/2007	S	0.3	6.3	7.9		10.2
1ACOA001.44	3/23/2007	S	0.3	11.8	7.8	12.8	9.7
1ACOA001.44	4/5/2007	S	0.3	14.4	8.2	10.7	8
1ACOA001.44	6/28/2007	S	0.3	29.8	8.3	9.6	11.3
1ACOA001.44	8/22/2007	S	0.3	26.8	8.2	7.1	13.8
1ACOA001.44	10/16/2007	S	0.3	20.5	7.8	8.7	16.1
1ACOA001.44	12/5/2007	S	0.3	6.2	7.8	10.8	16.7
1ACOA001.44	2/21/2008	S	0.3	5.9	8	10.1	14.5
1ACOA001.44	4/29/2008	S	0.3	18.4	8.4	8.3	8.6
1ACOA001.44	6/19/2008	S	0.3	25.7	7.2	9.6	8.8
1ACOA001.44	8/28/2008	S	0.3	24.1	7.4	7.9	13.2
1ACOA001.44	10/28/2008	S	0.3	13.2	8	9.4	13.6
1ACOA001.44	12/22/2008	S	0.3	5.5	8.1	10.6	17.2
1ACOA001.44	1/14/2009	S	0.3	3.9	8.2	12.5	14.9
1ACOA001.44	3/25/2009	S	0.3	9.1	8.1	11.5	14.3
1ACOA001.44	5/6/2009	S	0.3	17.6	8	9.1	12.3
1ACOA001.44	7/13/2009	S	0.3	27.6	8.2	8.2	12.3
1ACOA001.44	9/3/2009	S	0.3	23.3	7.9	7.5	13.7
1ACOA001.44	11/17/2009	S	0.3	12.9	7.6	10.2	11
1ACOA001.44	2/11/2010	S	0.3	1.4	7.2	12.3	7.8
1ACOA001.44	4/1/2010	S	0.3	14.7	7.8	10.2	7.4
1ACOA001.44	6/30/2010	S	0.3	28.6	8	7.1	11.3
1ACOA001.44	8/24/2010	S	0.3	26.8	7.9	6.3	14.3
1ACOA001.44	10/7/2010	S	0.3	18.6	7.7	9.3	14.1
1ACOA001.44	12/7/2010	S	0.3	5.1	7.4	11.2	15.2
90th percentile				**27.6**	**8.4**		
10th percentile				**5.6**	**7.4**		
Average							**12.5**

Attachment B

Facility Flow Diagram

LAKE PACKING CO. INC. FLOW DIAGRAM
WASTEWATER DISPOSAL FROM CANNING OPERATION





WASTE DISPOSAL SYSTEM - PLANT LAYOUT
FOR CANNING PRODUCTION
LAKE PACKING Co., INC.

REVISED
11/26/05
SLC

Attachment C

CORMIX2 Diffuser Modeling Results
Diffuser As-built Information

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Division - Office of Water Permit Support
629 East Main Street Richmond, Virginia 23219

M E M O R A N D U M

Subject: Lake Packaging

To: Denice Mosca, KRO

From: M. Dale Phillips Dale

Date: December 19, 1995

Copies:

Attached is the CORMIX model run for the subject company. The model indicates that the available dilution is about 60 to 1. Since this value is higher than our defaults, I would suggest that this value be used for both acute and chronic WLAs.

JAN 1 1 1996

```
CORMIX2 PREDICTION FILE
2222222222222222222222222222222222222222222222222222222222222222222222
                    CORNELL MIXING ZONE EXPERT SYSTEM
Subsystem CORMIX2:                                        Subsystem version:
 Submerged Multiport Diffuser Discharges     CORMIX_v.3.10_____________June_1995
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
CASE DESCRIPTION
 Site name/label:          Lake^Packaging
 Design case:              acute
 FILE NAME:                cormix\sim\lake     .cx2
 Time of Fortran run:      12/19/95--12:00:23

ENVIRONMENT PARAMETERS (metric units)
 Bounded section
 BS    =       7.62  AS    =      11.61  QA    =        .00  ICHREG= 2
 HA    =       1.52  HD    =       1.52
 Tidal Simulation at TIME =        .000 h
 PERIOD=     12.40 h UAmax =        .300 dUa/dt=        .100 (m/s)/h
 UA    =        .000 F     =        .170 USTAR = .0000E+00
 UW    =      2.000 UWSTAR= .2198E-02
 Uniform density environment
 STRCND=  U          RHOAM = 1100.0000

DIFFUSER DISCHARGE PARAMETERS (metric units)
 Diffuser type:      DITYPE= unidirectional_perpendicular
 BANK  =  RIGHT      DISTB =        .00  YB1   =        .30  YB2   =       6.40
 LD    =      6.10   NOPEN =   10        SPAC  =        .68
 D0    =      .025   A0    =       .000 H0    =        .03
 Nozzle/port arrangement:   unidirectional_without_fanning
 GAMMA =     90.00   THETA =     45.00  SIGMA =        .00  BETA  =      90.00
 U0    =      .285   Q0    =       .001       = .1400E-02
 RHO0  =  997.0455   DRHO0 = .1030E+03  GP0   = .9179E+00
 C0    = .1000E+04   CUNITS=  ppm
 IPOLL =  1          KS    = .0000E+00  KD    = .0000E+00

DIFFUSER PARAMETERS WITH IMAGE EFFECTS (metric units)
 The bank/shore proximity effect is accounted for by the following flow
 variables and definitions of length scales and parameters.
 LD    =     12.81   Q0    =       .003       = .2800E-02

FLUX VARIABLES - PER UNIT DIFFUSER LENGTH (metric units)
 q0    = .2190E-03   m0    = .6545E-04  j0    = .2107E-03  SIGNJ0=       1.0
 Associated 2-d length scales (meters)
 lQ=B  =       .001  lM    =       .02  lm    =  99999.00
 lmp   =  99999.00   lbp   =  99999.00  la    =  99999.00

FLUX VARIABLES - ENTIRE DIFFUSER (metric units)
 Q0    = .2800E-02   M0    = .8383E-03  J0    = .2699E-02
 Associated 3-d length scales (meters)
 LQ    =       .10   LM    =       .09  Lm    =  99999.00  Lb    =  99999.00
                                        Lmp   =  99999.00  Lbp   =  99999.00
 Tidal:              Tu    =    .0924 h Lu    =      3.073 Lmin  =       .095

NON-DIMENSIONAL PARAMETERS
 FR0   =     10.48   FRD0  =      1.88  R     =  99999.00
 (slot)              (port/nozzle)

FLOW CLASSIFICATION
 2222222222222222222222222222222222222222
 2  Flow class (CORMIX2)      =    MU1V   2
 2  Applicable layer depth HS =     1.52  2
 2222222222222222222222222222222222222222

MIXING ZONE / TOXIC DILUTION / REGION OF INTEREST PARAMETERS
```

```
 C0    = .1000E+04  CUN      ppm
 NTOX  =  0
 NSTD  =  0
 REGMZ =  0
 XINT  =   8000.00  XMAX  =   8000.00

X-Y-Z COORDINATE SYSTEM:
  because of bank/shore proximity, the ORIGIN is located directly
   at the RIGHT bank/shore.
  the bank/shore acts as a plane of symmetry for   the predicted
  plume geometry.
    X-axis points downstream, Y-axis points to left, Z-axis points upward.
NSTEP = 25 display intervals per module
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
BEGIN MOD101: DISCHARGE MODULE (SINGLE PORT AT DIFFUSER CENTER)

      X         Y         Z         S         C         BV        BH
     .00       .00       .03       1.0  .100E+04      .01       .01

END OF MOD101: DISCHARGE MODULE (SINGLE PORT AT DIFFUSER CENTER)
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
BEGIN CORJET (MOD110): JET/PLUME NEAR-FIELD MIXING REGION

 Jet/plume transition motion in weak crossflow.

 Zone of flow establishment:              THETAE=     45.00  SIGMAE=       .00
  LE    =        .00  XE    =       .00  YE    =       .00  ZE    =       .03

 Profile definitions:
   BV = Gaussian 1/e (37%) half-width, in vertical plane normal to trajectory
   BH = before merging: Gaussian 1/e (37%) half-width in horizontal plane
                        normal to trajectory
        after merging:  top-hat half-width in horizontal plane
                        parallel to diffuser line
   S  = hydrodynamic centerline dilution
   C  = centerline concentration (includes reaction effects, if any)

      X         Y         Z         S         C         BV        BH
 Individual jet/plumes before merging:
     .00       .00       .03       1.0  .100E+04      .01       .01
     .00       .00       .03       1.0  .100E+04      .01       .01
     .03       .00       .08       1.5  .685E+03      .02       .02
     .04       .00       .13       2.3  .428E+03      .02       .02
     .06       .00       .18       3.4  .293E+03      .03       .03
     .07       .00       .24       4.7  .214E+03      .03       .03
     .07       .00       .29       6.1  .164E+03      .04       .04
     .08       .00       .34       7.6  .131E+03      .04       .04
     .08       .00       .40       9.4  .107E+03      .05       .05
     .09       .00       .45      11.2  .892E+02      .05       .05
     .09       .00       .51      13.2  .758E+02      .06       .06
     .09       .00       .56      15.3  .653E+02      .06       .06
     .10       .00       .62      17.5  .570E+02      .07       .07
     .10       .00       .67      19.9  .503E+02      .07       .07
     .10       .00       .73      22.4  .447E+02      .08       .08
     .10       .00       .78      25.0  .401E+02      .08       .08
     .10       .00       .83      27.7  .361E+02      .09       .09
     .11       .00       .89      30.5  .328E+02      .10       .10
     .11       .00       .94      33.4  .299E+02      .10       .10
     .11       .00      1.00      36.4  .275E+02      .11       .11
     .11       .00      1.05      39.5  .253E+02      .11       .11
     .11       .00      1.11      42.8  .234E+02      .12       .12
     .11       .00      1.16      46.1  .217E+02      .12       .12
     .11       .00      1.22      49.6  .202E+02      .13       .13
```

.12	.00	[illegible]	53.1	.188E+02	[illegible]	.13
.12	.00	[illegible]	56.7	.176E+02	[illegible]	.14
.12	.00	1.38	60.4	.165E+02	.14	.14

Cumulative travel time = 5. sec

Merging of individual jet/plumes not found in this module, but interaction will occur in following module. Overall jet/plume interaction dimensions:

.12	.00	1.38	60.4	.165E+02	.14	6.42

END OF CORJET (MOD110): JET/PLUME NEAR-FIELD MIXING REGION

BEGIN MOD232: LAYER BOUNDARY IMPINGEMENT/UPSTREAM SPREADING

Vertical angle of layer/boundary impingement = 88.97 deg
Horizontal angle of layer/boundary impingement = .00 deg

Discharge into STAGNANT AMBIENT environment:
STEADY-STATE MIXING CONDITION IS NOT POSSIBLE in this zone, even though some ADDITIONAL DILUTION MAY OCCUR!
Also, all far-field processes will be UNSTEADY.
SIMULATION STOPS because of stagnant ambient conditions.

END OF MOD232: LAYER BOUNDARY IMPINGEMENT/UPSTREAM SPREADING

** End of NEAR-FIELD REGION (NFR) **

Recall that the plume is symmetric to the bank/shore on which the centerline (X-axis) is located.

SIMULATION STOPS because of STAGNANT AMBIENT conditions.
All far-field processes will be UNSTEADY.

CORMIX2: Submerged Multiport Diffuser Discharges End of Prediction File
2222222222222222222222222222222222222222222222222222222222222222222222222222

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION - KILMARNOCK OFFICE
P. O. BOX 669
KILMARNOCK, VA 22482
Phone: 804 435-3181
Fax: 804 435-0485

FAX COVER SHEET

TO: Dale Phillips OWPS DATE: 12-5-95

FROM: Denise Mosca Ko #PAGES 4

SUBJECT: Diffuser Modeling Assistance - Lake Packing Co. - Northumberland Co.

COMMENTS/ INSTRUCTIONS

Please evaluate the attached information for the appropriate mixing ratio for their discharge to the Coan River. Owner presently has a VPA for the homing canning discharge & is going direct with it. The discharge is 2/3 non-contact cooling water. Please call if any questions.

KILMARNOCK OFFICE FAX NO. 804 435-0485

Request for modeling assistance for diffusor discharge

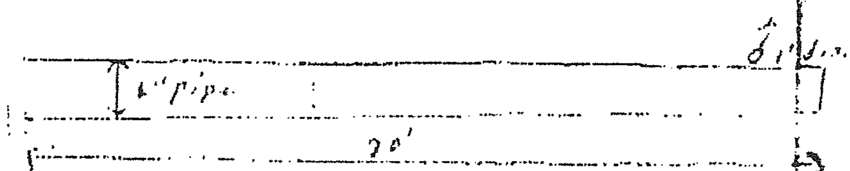
To: Dale Phillips, OWRM

Name of Discharger:	Lake Packing Co. Inc.	
Flow of Discharge:	30,610 gpd	.031460 = .0014 M³
Temperature of discharge:	winter 35°F, summer 65°F	
Salinity of discharge:	0.1 ppt	
Name of receiving stream:	Coan River	
7Q10 at discharge site:	0	
1Q10 at discharge site:	0	
Tidal range at site:	18-24 inches	
Max tidal velocity at site:	2 mph	
Temperature of stream:	90th percentile 29°C	
Salinity of stream:	mean 10.4	
Average depth of stream:	8-10 ft deep	2.74
Width of stream:	2500 ft	762
Depth of diffusor:	5 ft	1.524
Length of diffusor:	20 ft	6.096
Number of ports:	120 holes, 1 in. diam.	
Distance of 1st. port from bank:	1 ft	.3048
Distance of last port from bank:	20 ft	6.096

Brief schematic drawing of diffusor, with description of port details (if appropriate) and the direction of jet flow from ports shown in both the horizontal and vertical directions (put below or on attachment).

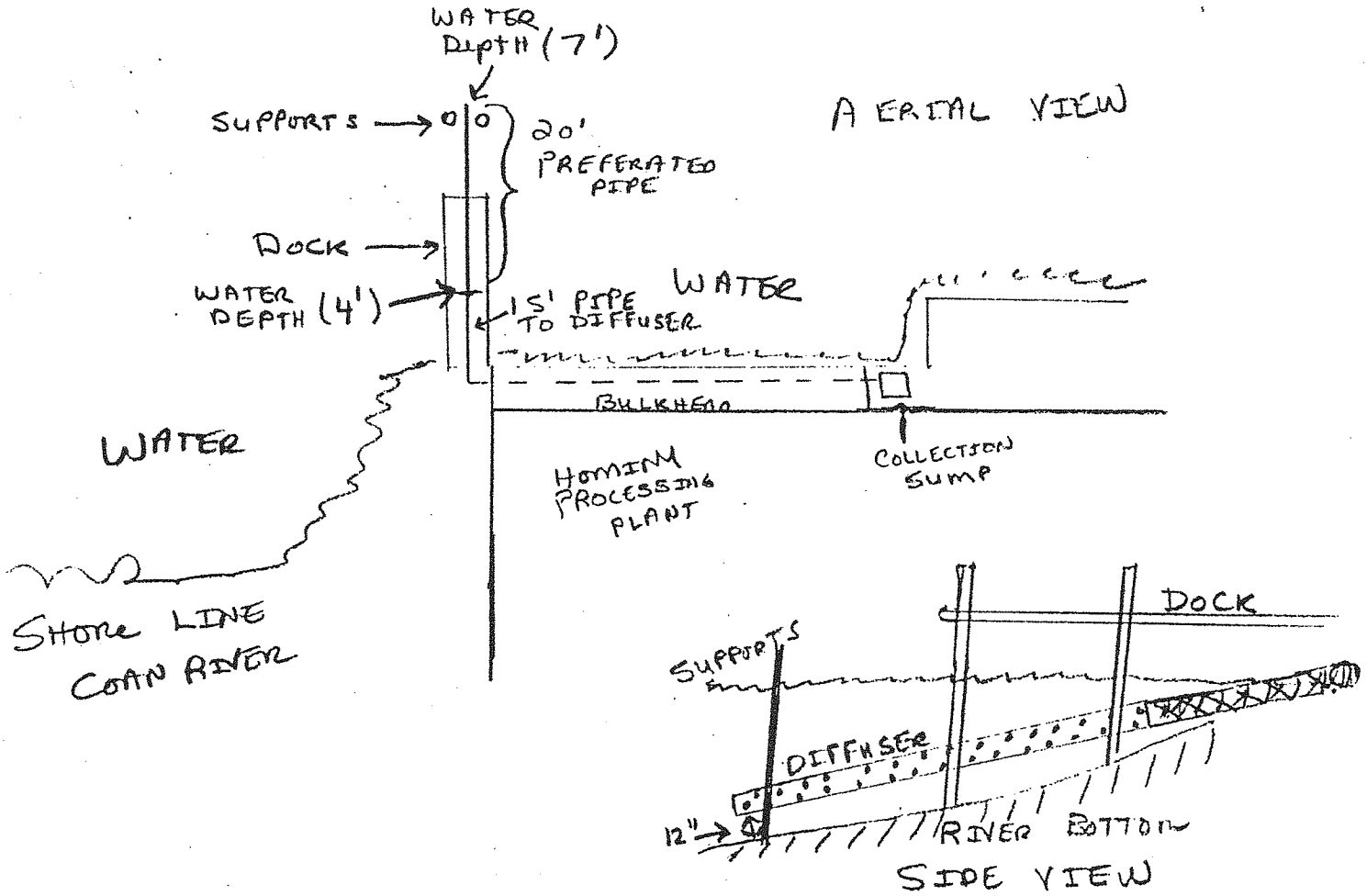
see below from consultant-

holes with 20' long 6" pipe

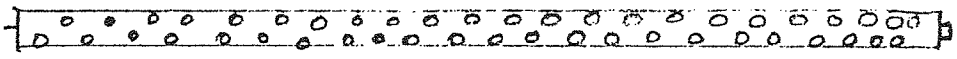


6.096
.3048
6.4008

[redacted]IKE PACKING Co., INC.
HOMINY WASTEWATER DIFFUSER



DIFFUSER



6" PVC THREADED PLUG.

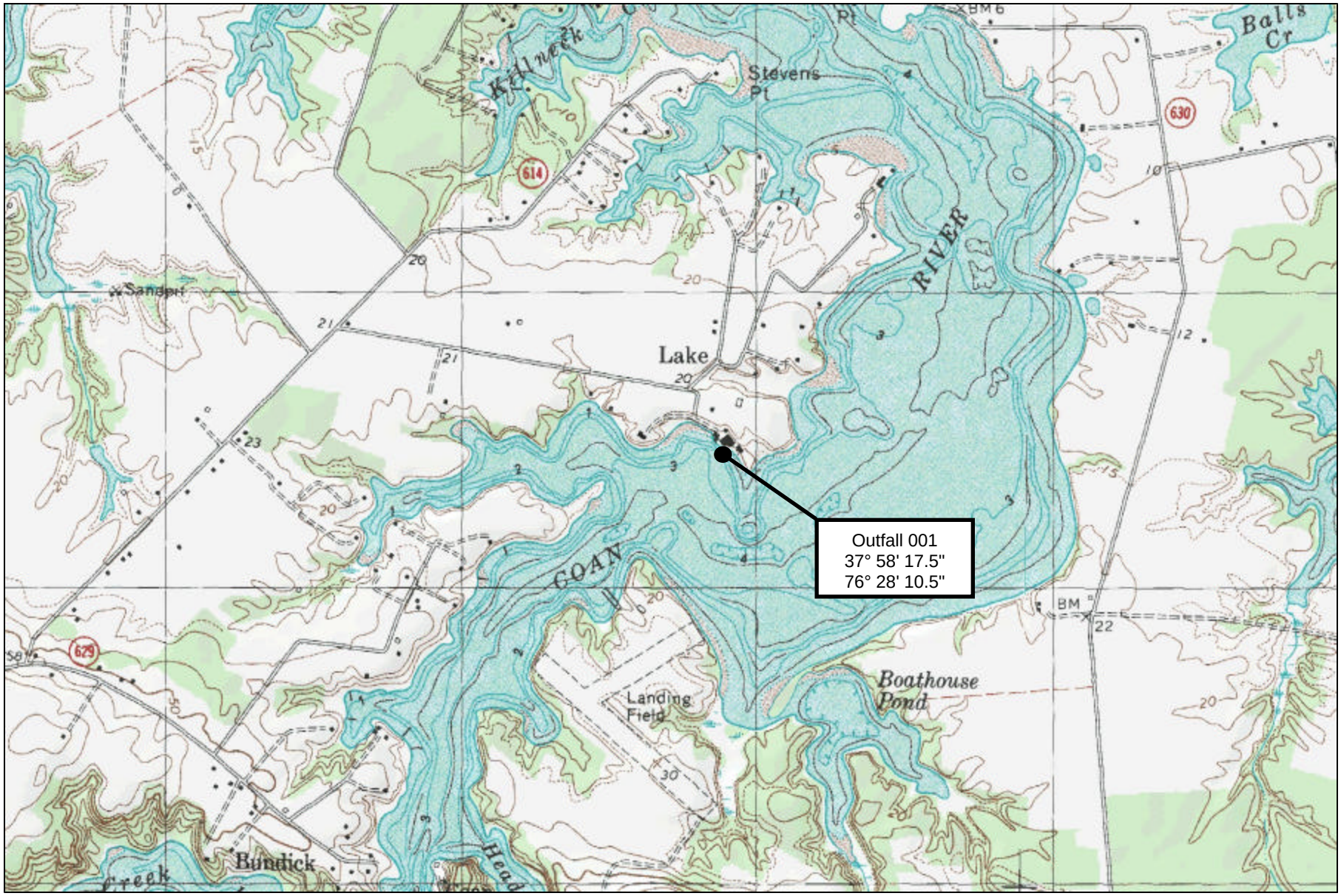
20' x 6" SCHEDULE 40 PVC PIPE

120 - 1¼" HOLES PLACED IN PIPE IN SPIRAL PATTERN.

HOMINY WASTEWATER DIFFUSER
INSTALLED 6/4/96

Attachment D

Topographic Map



Map provided by MyTopo.com

Attachment E

Site Inspection Report

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

Piedmont Regional Office

WASTEWATER FACILITY INSPECTION REPORT

FACILITY NAME:	Lake Packing Company, Inc.	**INSPECTOR:**	Mike Dare MD 2-14-11
PERMIT No.:	VA0089231	**INSPECTION DATE:**	February 11, 2011
TYPE OF FACILITY:	Industrial Minor/Small	**REPORT COMPLETED:**	February 14, 2011
COUNTY/~~CITY~~:	Northumberland	**UNANNOUNCED INSPECTION:**	No
REVIEWED BY:	Chuck Stitzer 2/14/11 KW 2/15/11		
PRESENT DURING INSPECTION:	S. Lake Cowart, Jr.		

I. OPERATIONAL UNIT REVIEW AND CONDITION:

This Permit addresses the discharge of non-contact cooling water from 12 retorts and the wastewater discharges from a reverse osmosis (R/O) unit. The retorts and R/O unit are part of a canning operation which was not running at the time of inspection. Drain lines from the 12 retorts and the R/O unit connect to a trough that runs to a junction box. A pipe in the junction box runs to a nearby submerged diffuser located just offshore in the Coan River.

II. ULTIMATE DISPOSAL OF SOLIDS:

N/A; Solids are not generated by this system in the amount requiring disposal.

III. FIELD DATA:

Flow:	__MGD	**Dissolved Oxygen:**	___mg/L	**Contact Chlorine Res.:**	_____mg/L
pH:	__S.U.	**Final Chlorine Res.:**	__ mg/L	**Temperature:**	______ °C

Calibration Time/Initials/documentation:

Condition of Effluent: ***Not in operation at time of inspection***

Condition of Receiving Stream: ***Clear***

Samples Collected during the inspection: ***Not in operation at time of inspection***

IV. PLANT OPERATIONS AND MAINTENANCE:

Operations and Maintenance Manual: ***Approved 12/7/01***

Class and Number of Licensed Operators: ***None required.***

Alarm Systems and Alternate Power: ***None***

Any bypassing since last inspection? ***None reported.***

When was the RPZ device last checked? ***N/A***

Name, number and description of pump stations: ***N/A***

V. COMMENTS:

Items evaluated during this inspection include (check all that apply):

[x] Yes	[ ] No		Operational Units
[ ] Yes	[x] No		O & M Manual
[ ] Yes	[x] No		Maintenance Records
[ ] Yes	[ ] No	[x] N/A	Pathogen Reduction & Vector Attraction Reduction
[ ] Yes	[ ] No	[x] N/A	Sludge Disposal Plan
[ ] Yes	[ ] No	[x] N/A	Groundwater Monitoring Plan
[ ] Yes	[ ] No	[x] N/A	Storm Water Pollution Prevention Plan
[x] Yes	[ ] No	[ ] N/A	Permit Special Conditions
[ ] Yes	[ ] No	[x] N/A	Permit Water Quality Chemical Monitoring
[x] Yes	[ ] No	[ ] N/A	Laboratory Records (see Lab Report)

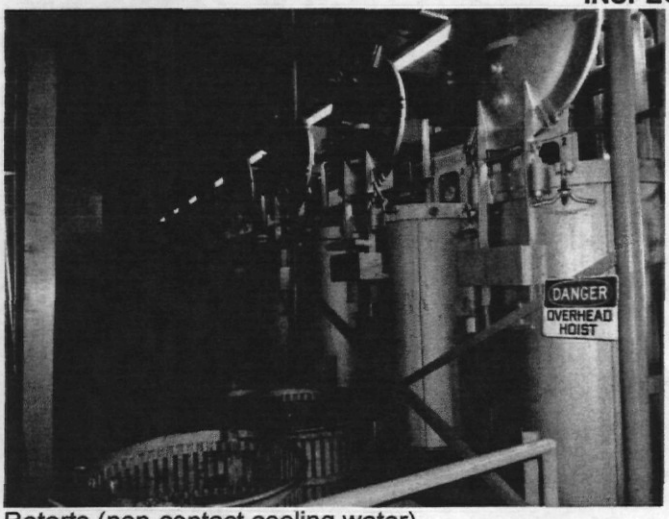
VI. GENERAL RECOMMENDATIONS:

1. There are no general recommendations.

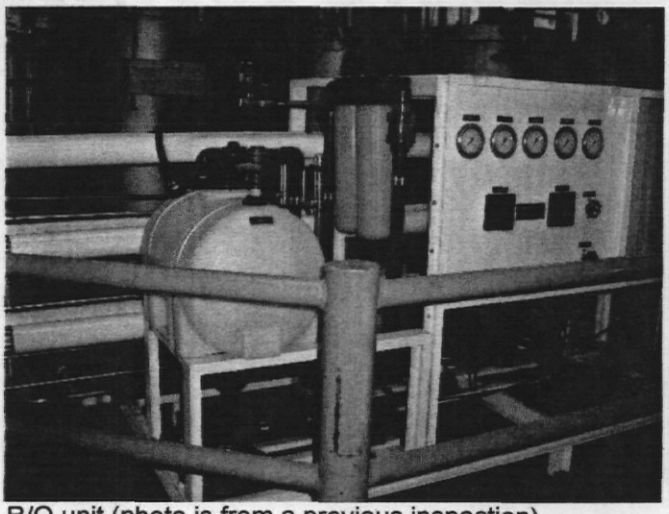
VII. COMPLIANCE RECOMMENDATIONS/REQUEST FOR CORRECTIVE ACTION:

1. There are no compliance recommendations.

INSPECTION PHOTOS



Retorts (non-contact cooling water)



R/O unit (photo is from a previous inspection)

Trough (shown) is connected to junction box/discharge pipe (photo is from a previous inspection)

Junction box (foreground) is piped to the submerged discharge off the end of the pier (background)

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
LABORATORY INSPECTION REPORT

Form Updated 10/4/2001

FACILITY NO:	INSPECTION DATE:	PREVIOUS INSP. DATE:	PREVIOUS EVALUATION:	TIME SPENT:
VA0089231	February 11, 2011	October 30, 2007	No Deficiencies	8 hours w/ travel & report

NAME/ADDRESS OF FACILITY:	FACILITY CLASS:	FACILITY TYPE:	UNANNOUNCED INSPECTION?
Lake Packing Company, Inc. 755 Lake Landing Drive Lottsburg, Virginia 22511	( ) MAJOR (x) MINOR ( ) SMALL ( ) VPA/NDC	( ) MUNICIPAL (x) INDUSTRIAL ( ) FEDERAL ( ) COMMERCIAL LAB	( ) YES (x) NO **FY-SCHEDULED INSPECTION?** ( ) YES (x) NO

INSPECTOR(S):	REVIEWERS:	PRESENT AT INSPECTION:
Mike Dare MD 2-14-11	CS 2-14-11 KW 1/15/11	S. Lake Cowart, Jr., Drew Hammond (DEQ)

LABORATORY EVALUATION	DEFICIENCIES? Yes	No
LABORATORY RECORDS	X	
GENERAL SAMPLING & ANALYSIS		X
LABORATORY EQUIPMENT	X	
DO ANALYSIS PROCEDURES		X
pH ANALYSIS PROCEDURES	X	

QUALITY ASSURANCE/QUALITY CONTROL

Y/N	QUALITY ASSURANCE METHOD	PARAMETERS	FREQUENCY
	REPLICATE SAMPLES		
	SPIKED SAMPLES		
	STANDARD SAMPLES		
	SPLIT SAMPLES		
	SAMPLE BLANKS		
	OTHER		
	EPA-DMR PE SAMPLES?	RATING: ( ) No Deficiency ( ) Deficiency (x) NA	
	QC SAMPLES PROVIDED?	RATING: ( ) No Deficiency ( ) Deficiency (x) NA	

COPIES TO: (X) DEQ - PRO; ( ) OWCP; ( ) VDH- FO and DWE; (X) OWNER; ( ) EPA-Region III; ( ) Other:

FACILITY # VA0089231

LABORATORY RECORDS SECTION

LABORATORY RECORDS INCLUDE THE FOLLOWING:

X	SAMPLING DATE	X	ANALYSIS DATE	N/A	CONT MONITORING CHART
X	SAMPLING TIME	X	ANALYSIS TIME	X	INSTRUMENT CALIBRATION
X	SAMPLE LOCATION	X	TEST METHOD	X	INSTRUMENT MAINTENANCE
				X	CERTIFICATE OF ANALYSIS

WRITTEN INSTRUCTIONS INCLUDE THE FOLLOWING:

X	SAMPLING SCHEDULES	X	CALCULATIONS	X	ANALYSIS PROCEDURES

	YES	NO	N/A
DO ALL ANALYSTS INITIAL THEIR WORK?		X	
DO BENCH SHEETS INCLUDE ALL INFORMATION NECESSARY TO DETERMINE RESULTS?	X		
IS THE DMR COMPLETE AND CORRECT? MONTH(S) REVIEWED: **2010 Reports**	X		
ARE ALL MONITORING VALUES REQUIRED BY THE PERMIT REPORTED?	X		

GENERAL SAMPLING AND ANALYSIS SECTION

	YES	NO	N/A
ARE SAMPLE LOCATION(S) ACCORDING TO PERMIT REQUIREMENTS?	X		
ARE SAMPLE COLLECTION PROCEDURES APPROPRIATE?	X		
IS SAMPLE EQUIPMENT CONDITION ADEQUATE?	X		
IS FLOW MEASUREMENT ACCORDING TO PERMIT REQUIREMENTS?	X		
ARE COMPOSITE SAMPLES REPRESENTATIVE OF FLOW?	X		
ARE SAMPLE HOLDING TIMES AND PRESERVATION ADEQUATE?	X		
IF ANALYSIS IS PERFORMED AT ANOTHER LOCATION, ARE SHIPPING PROCEDURES ADEQUATE? LIST PARAMETERS AND NAME & ADDRESS OF LAB: **EnviroCompliance Labs, Ashland, VA** **TSS, CBOD**	X		

LABORATORY EQUIPMENT SECTION

	YES	NO	N/A
IS LABORATORY EQUIPMENT IN PROPER OPERATING RANGE?	X		
ARE ANNUAL THERMOMETER CALIBRATION(S) ADEQUATE?		X	
IS THE LABORATORY GRADE WATER SUPPLY ADEQUATE?			X
ARE ANALYTICAL BALANCE(S) ADEQUATE?			X

LABORATORY INSPECTION REPORT SUMMARY

FACILITY NAME:	FACILITY NO:	INSPECTION DATE:
Lake Packing Co., Inc.	VA0089231	February 11, 2011
OVERALL LABORATORY EVALUATION:	**(x) Deficiencies** **( ) No Deficiencies**	

LABORATORY RECORDS

1. Analysts should initial pH and DO analysis forms.
2. Sampler should consistently print and sign their name on the chain of custody form.
3. If data received from the contract lab is less than the QL (See permit part I B 3), then <QL should be reported on the DMR. (The permit QL level for CBOD is 5 mg/L. The permit QL for TSS is 1.0 mg/L.)

GENERAL SAMPLING AND ANALYSIS

None

LABORATORY EQUIPMENT

1. DO Instrument thermister must be verified annually against a NIST traceable thermometer.

INDIVIDUAL PARAMETERS

pH ANALYSIS PROCEDURES

1. Initial demonstration of capability now required for each analyst. Procedure: Analyze 4 samples of known pH. May use external source of buffer (different lot/manufacturer than buffers used to calibrate meter). Recovery for each of the 4 samples must be +/- 0.1 SU of the known concentration of the sample. Record results (including temperatures) and maintain on file.

COMMENTS

None

ANALYST:	A. J. Erskine (By phone 2/14/11)	VPDES NO	VA0089231

Meter: YSI 55

Parameter: Dissolved Oxygen
Method: Membrane Electrode
Facility Elevation <100'
1/08

METHOD OF ANALYSIS:

x	18th Edition of Standard Methods – 4500-O G
	21st or Online Editions of Standard Methods – 4500-O G (01)

	DO is a method-defined analyte so modifications are not allowed. [40 CFR Part 136.6]	**Y**	**N**
1)	If samples are collected, is collection carried out with a minimum of turbulence and air bubble formation and is the sample bottle allowed to overflow several times its volume? [1.c]	**In-situ**	
2)	Are meter and electrode operable and providing consistent readings? [3]	**X**	
3)	Is membrane in good condition without trapped air bubbles? [3.b]	**X**	
4)	Is correct filling solution used in electrode? [Mfr.]	**X**	
5)	Are water droplets shaken off the membrane prior to calibration? [Mfr.]	**X**	
6)	Is meter calibrated before use or at least daily? [Mfr. & Part 1020]	**X**	
7)	Is calibration procedure performed according to manufacturer's instructions? [Mfr.]	**X**	
8)	Is sample stirred during analysis? [Mfr.]	**In-situ**	
9)	Is the sample analysis procedure performed according to manufacturer's instructions? [Mfr.]	**X**	
10)	Is meter stabilized before reading D.O.? [Mfr.]	**X**	
11)	Is electrode stored according to manufacturer's instructions? [Mfr.]	**X**	
12)	Is a duplicate sample analyzed after every 20 samples if citing 18th or 19th Edition or daily if citing 20th or 21st Edition? [Part 1020] **NOTE**: Not required for *in situ* samples.	**N/A**	
13)	If a duplicate sample is analyzed, is the reported value for that sampling event the average concentration of the sample and the duplicate? [DEQ]	**N/A**	
14)	If a duplicate sample is analyzed, is the relative percent difference (RPD) ≤ 20? [18th ed. Table 1020 I; 21st ed. DEQ]	**N/A**	

COMMENTS: IDC has been performed.

(12 – 14) Duplicate sample analysis is no longer required by DEQ for field instruments.

ANALYST:	S. Lake Cowart, Jr.	VPDES NO	VA0089231

Meter: Oakton pH Testr 2 Parameter: Hydrogen Ion (pH)
1/08

Method: Electrometric

METHOD OF ANALYSIS:

x	18th Edition of Standard Methods – 4500-H^+ B
	21st or Online Editions of Standard Methods – 4500-H^+ B (00)

	pH is a method-defined analyte so modifications are not allowed. [40 CFR Part 136.6]	Y	N
1)	Is a certificate of operator competence or initial demonstration of capability available for each analyst/operator performing this analysis? **NOTE**: Analyze 4 samples of known pH. May use external source of buffer (different lot/manufacturer than buffers used to calibrate meter). Recovery for each of the 4 samples must be +/- 0.1 SU of the known concentration of the sample. [SM 1020 B.1]		x
2)	Is the electrode in good condition (no chloride precipitate, scratches, deterioration, etc.)? [2.b/c and 5.b]	x	
3)	Is electrode storage solution in accordance with manufacturer's instructions? [Mfr.]	x	
4)	Is meter calibrated on at least a daily basis using three buffers all of which are at the same temperature? [4.a] **NOTE**: Follow manufacturer's instructions. **Calibrated prior to each use**	x	
5)	After calibration, is a buffer analyzed as a check sample to verify that calibration is correct? Agreement should be within +/- 0.1 SU. [4.a]	x	
6)	Do the buffer solutions appear to be free of contamination or growths? [3.1]	x	
7)	Are buffer solutions within the listed shelf-life or have they been prepared within the last 4 weeks? [3.a]	x	
8)	Is the cap or sleeve covering the access hole on the reference electrode removed when measuring pH? [Mfr.]	N/A	
9)	For meters with ATC that also have temperature display, is the thermometer verified annually? [SM 2550 B.1]	N/A	
10)	Is temperature of buffer solutions and samples recorded when determining pH? [4.a]	x	
11)	Is sample analyzed within 15 minutes of collections? [40 CFR Part 136]	x	
12)	Is the electrode rinsed and then blotted dry between reading solutions (Disregard if a portion of the next sample analyzed is used as the rinsing solution.)? [4.a]	X*	
13)	Is the sample stirred gently at a constant speed during measurement? [4.b]	X*	
14)	Does the meter hold a steady reading after reaching equilibrium? [4.b]	X*	
15)	Is a duplicate sample analyzed after every 20 samples if citing 18th or 19th Edition or daily for 20th or 21st Edition? [Part 1020] **NOTE**: Not required for *in situ* samples.	N/A	
16)	Is the pH of duplicate samples within 0.1SU of the original sample? [Part 1020]	N/A	
17)	Is there a written procedure for which result will be reported on DMR (Sample or Duplicate) and is this procedure followed? [DEQ]	N/A	

PROBLEMS: 1) Initial Demonstration of Capability has not been performed.

*Note: (12 – 14) Based on interview of Mr. Cowart, Jr.

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
SAMPLE ANALYSIS HOLDING TIME/CONTAINER/PRESERVATION CHECK SHEET
Revised 3/08 [40 CFR, Part 136.3, Table II]

FACILITY NAME:	**Lake Packing Co., Inc.**	VPDES NO	**VA0089231**	DATE:	**February 11, 2011**

HOLDING TIMES						SAMPLE CONTAINER				PRESERVATION				
PARAMETER	APPROVED	MET?		LOGGED?		ADEQ. VOLUME		APPROP. TYPE		APPROVED	MET?		CHECKED?	
		Y	N	Y	N	Y	N	Y	N		Y	N	Y	N
CBOD	48 HOURS	X		X		X		X		ANALYZE 2 HRS or 6°C	X		X	
TSS	7 DAYS	X		X		X		X		6°C	X		X	
FECAL COLIFORM / *E. coli / Enterococci*	6 HRS & 2 HRS TO PROCESS									10°C (1 HOUR)+ 0.008% $Na_2S_2O_3$				
pH	15 MIN.	X		X		X		X		N/A				
CHLORINE	15 MIN.									N/A				
DISSOLVED 0_2	15 MIN./IN SITU	X		X		X		X		N/A				
TEMPERATURE	IMMERSION STAB.									N/A				
OIL & GREASE	28 DAYS									6°C + H_2SO_4/HCL pH<2				
AMMONIA	28 DAYS									6°C + H_2S0_4 pH<2 DECHLOR				
TKN	28 DAYS									6°C + H_2S0_4 pH<2 DECHLOR				
NITRATE	48 HOURS									6°C				
NITRATE+NITRITE	28 DAYS									6°C + H_2S0_4 pH<2				
NITRITE	48 HOURS									6°C				
PHOSPHATE, ORTHO	48 HOURS									FILTER, 6°C				
TOTAL PHOS.	28 DAYS									6°C+ H_2S0_4 pH<2				
METALS (except Hg)	6 MONTHS									HNO_3 pH<2				
MERCURY (CVAA)	28 DAYS									HNO_3 pH<2				
PROBLEMS: None										PROBLEMS: None				

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
EQUIPMENT TEMPERATURE LOG/THERMOMETER VERIFICATION CHECK SHEET
1/08

FACILITY NAME:	**Lake Packing Co., Inc.**	VPA NO:	**VA0089231**	DATE:	**February 11, 2011**

EQUIPMENT	RANGE	IN RANGE		INSPECT READING °C	CHECK & LOG DAILY		CORRECT INCREMENT		ANNUAL THERMOMETER VERIFICATION				
									Is the NIST / NIST-Traceable Reference Thermometer within the manufacturer's expiration date or recertified yearly? **NIST certified thermometer used with pH meter**			Y	
									DATE CHECKED	MARKED		CORR FACTOR	INSPECT TEMP
		Y	N		Y	N	Y	N		Y	N	°C	°C
SAMPLE REFRIGER.	1-6°C												
AUTO SAMPLER	1-6° C												
BOD INCUBATOR	20 ± 1° C												
SOLIDS DRYING OVEN	103-105° C												
WATER BATH	44.5 ± .2° C												
INCUBATOR	35± .5° C												
AUTOCLAVE	121° C IN 30 MIN												
HOT AIR STERILIZING	170 ± 10° C												
O & G WATER BATH	70± 2° C												
REAGENT REFRIGER.	1-6° C												
pH METER	± 1° C								**N/A***				
DO METER	± 1° C								**Not Checked**				
THERMOMETER	± 1° C								**2/23/10**	**x**			
Hg WATER BATH	95 ° C												

PROBLEM: **DO Instrument thermister must be verified annually against a NIST traceable thermometer.**

COMMENT: ***pH Instrument not equipped with temperature display. Used in conjunction with a NIST certified thermometer.**

Lake Packing Co. & Cowart Seafood Corp.
Dissolved Oxygen Reading

Date: 6/14/18

ANALYST SHOULD INITIAL

Product Produced: _____

PPT Salt: Ø

Sample Temperature: 26.4 °C

Test Location: _____

D O Reading Mg/L: 5.77 mg/L

Calibrated by: _____ /Temp Cal. To: 23.4 °C % Cal or Mg/L 101.5 %

Time of Reading: 3.30pm

NOTE: D O meter must be calibrated at least once per year against a "nist" thermometer.
Thermometer No: _____
Date thermometer calibrated: _____
Date D O meter calibrated: _____
Was D O meter within 1°C or less of thermometer? Yes/no

VPDES Cooling Water

pH Daily Operation Log

Facility Name: LAPW **VPDES#:**

Date: 6/14/10 Cooling Water

Method: pH Meter, Make/Model # OAKTON ~~Double Junction 2~~ ATC probe?: Y or (N)
(if no, note temps)

Sample Location:

Analyst:

Calibration:

Buffer 4 = 4.0 / 26° °C

Buffer 7 = 7.0 / 26° °C

Buffer 10 = 10.0 / 26° °C

Re-read - Buffer 7 = 7.0 / 26° °C

ANALYST SHOULD INITIAL

Sample Time: 3:21 PM

Analysis Time: 3:28 PM

Value, S.U.: 7.6 / 28° °C, if applicable)

Comments/Maintenance:

THERM # 8140

pH Methodology
4500 – H + B Electrometric Method

Documentation of NBS Thermo Calibration:
(Must be at temperature range being monitored)

NOTE: When calibrating pH meter, calibrate pH 4.0, 7.0, and 10.0 buffers. Return and read pH 7. Must be within 0.1.

EnviroCompliance Laboratories, Inc.
10357 Old Keeton Road
Ashland, VA 23005
(804) 550-3971 Fax (804) 550-3826

VPDES

CHAIN OF CUSTODY

Page 1 of 1

Client: LAKE PACKING Co INC
Contact: S. LAKE CONNECT, JR
Address: 755 LAKE LANDING DR
City: Lottsburg, VA. 22511
Phone: 804-529-6101 Fax: 804-529-737
PO No.

PROJECT NO.:
PROJECT NAME: ~~COOLING WASTE WATER~~

SAMPLERS: (Signatures) (Print)
SIGN + PRINT NAME

STATION	DATE	TIME	SAMPLE IDENTIFICATION	# Cont	Matrix	Cmp/Grb	Preserv	TSS	BOD5									
DISC TANK	9/20/10	Am 11:00 – 5:00 PM	1. COOLING Water	1	Comp			✓										1.
DISC TANK	9/20/10		2. " "	1	Comp				✓									2.
			3.															3.
			4.															4.
			5.															5.
			6.															6.
			7. SAMPLES ICED DURING Collection + SHIPMENT															7.
			8.															8.
			9. COMPOSITE SAMPLES Completed @ 5:00 PM PM															9.
			10.															10.
			11.															11.
			12.															12.
			13.															13.
			14.															14.
			15.															15.
			16.															16.
			17.															17.
			18.															18.
			19.															19.
			20.															20.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Temp.	LAB USE ONLY
Preston [illegible]	9/21/10	1330	[signature]	4	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Cond.	
Relinquished by: (Signature)	Date	Time	Received for Lab by:		

Matrices: W=Water S=Soil O=Organic Aq=Aqueous Sl=Sludge F=Filter M=Misc.

Preservatives: N=Nitric H=Hydrochloric Na=Sodium Hydroxide S=Sulfuric T=Thiosulfate Z=Zinc Acetate

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Lake Packing Company Incorporated
ADDRESS Box 200
Lottsburg VA 22511
FACILITY LOCATION 755 Lake Landing Dr

Piedmont Regional Office
NOV 05 2010
RECEIVED

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Industrial Minor 06/20/2006

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)
Piedmont Regional Office
4949-A Cox Road
Glen Allen VA 23060

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

VA0089231	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	10	10	1	TO	10	12	31

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
001 FLOW	REPORTD	.029	.029	MGD						1/3M	EST
	REQRMNT	NL	NL	MGD	********	********	********			1/3M	EST
002 PH	REPORTD	<QL	<QL		7.8	<QL	7.8	SU		1/3M	GRAB
	REQRMNT	********	********		6.0	********	9.0<QL	SU		1/3M	GRAB
004 TSS	REPORTD	<4.0	<4.0	KG/D		<4.0	<4.0	MG/L		1/3M	24HC
	REQRMNT	NL	NL	KG/D	********	NL	NL	MG/L		1/3M	24HC
007 DO	REPORTD				5.55			MG/L		1/3M	GRAB
	REQRMNT	********	********		5.0	********	********	MG/L		1/3M	GRAB
080 TEMPERATURE, WATER (DEG. C)	REPORTD					29.5	29.5	°C		1/3M	GRAB
	REQRMNT	********	********		********	NL	NL	C		1/3M	GRAB
159 CBOD5	REPORTD	<22	<22	KG/D		<20	<20	MG/L		1/3M	24HC
	REQRMNT	2.8	5.5	KG/D	********	25	50	MG/L		1/3M	24HC
	REPORTD	<QL	<QL			<QL	<QL				
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)
	0	0	0

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

OPERATOR IN RESPONSIBLE CHARGE			DATE		
S. LAKE COLART JR	S. Lake Colart Jr		10	10	29
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
S. LAKE COLART JR	S. Lake Colart Jr	804 529 6101	10	10	29
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

Attachment F

Effluent DMR Data

Facility Name: Lake Packing Company, Inc. Permit No: VA0089231
Outfall: 001

DMR Due Date	Flow		$cBOD_5$			
	Monthly Avg.	Maximum	Monthly Avg.		Maximum	
	MGD	MGD	mg/L	kg/d	mg/L	kg/d
2/10/08	NULL	NULL	NULL	NULL	NULL	NULL
5/10/08	NULL	NULL	NULL	NULL	NULL	NULL
8/10/08	0.029	0.029	<2	<.22	<2	<.22
11/10/08	0.006	0.006	<2.0	<.05	<2.0	<.05
2/10/09	NULL	NULL	NULL	NULL	NULL	NULL
5/10/09	0.029	0.029	<2.0	<.22	<2.0	<.22
8/10/09	0.004	0.004	<2.0	<.03	<2.0	<.03
11/10/09	0.029	0.029	<2.0	<.22	<2.0	<.22
2/10/10	NULL	NULL	NULL	NULL	NULL	NULL
5/10/10	NULL	NULL	NULL	NULL	NULL	NULL
8/10/10	0.029	0.029	<2	<.22	<2	<.22
11/10/10	0.029	0.029	<2.0	<.22	<2.0	<.22
2/10/11	0.029	0.029	<2.0	<.22	<2.0	<.22

DMR Due Date	TSS				DO
	Monthly Avg.		Maximum		Minimum
	mg/L	kg/d	mg/L	kg/d	mg/L
2/10/08	NULL	NULL	NULL	NULL	NULL
5/10/08	NULL	NULL	NULL	NULL	NULL
8/10/08	<1.0	<.11	<1.0	<.11	5.38
11/10/08	<1.0	<.02	<1.0	<.02	5.18
2/10/09	NULL	NULL	NULL	NULL	NULL
5/10/09	2.8	0.307	2.8	0.307	5.19
8/10/09	1.2	0.018	1.2	0.018	5.2
11/10/09	<1.0	<.11	<1.0	<.11	5.29
2/10/10	NULL	NULL	NULL	NULL	NULL
5/10/10	NULL	NULL	NULL	NULL	NULL
8/10/10	1.0	0.11	1.0	0.11	5.77
11/10/10	<1.0	<.11	<1.0	<.11	5.59
2/10/11	<1.0	<.11	<1.0	<.11	5.55

DMR Due Date	Temperature		pH	
	Monthly Avg.	Maximum	Minimum	Maximum
	°C	°C	s.u.	s.u.
2/10/08	NULL	NULL	NULL	NULL
5/10/08	NULL	NULL	NULL	NULL
8/10/08	34.4	34.4	7.6	7.6
11/10/08	31	31	7.9	7.9
2/10/09	NULL	NULL	NULL	NULL
5/10/09	29	29	7.8	7.8
8/10/09	32	32	8.4	8.4
11/10/09	26.7	26.7	8.2	8.2
2/10/10	NULL	NULL	NULL	NULL
5/10/10	NULL	NULL	NULL	NULL
8/10/10	28.5	28.5	7.6	7.6
11/10/10	28.0	28.0	7.7	7.7
2/10/11	29.5	29.5	7.8	7.8
	90th %	**32.7**	**90th %**	**8.3**
			10th %	**7.6**

Attachment G

Water Quality Criteria Monitoring Summary

WATER QUALITY CRITERIA MONITORING SUMMARY

CHEMICAL	REQUIRED QUANTIFICATION LEVEL [1]	REPORTED RESULTS (µg/L)
METALS		
Antimony, dissolved	1.4	<0.82
Arsenic, dissolved	1.0	<1.0
Cadmium, dissolved	0.3	<0.2
Chromium III, dissolved [3]	3.6	<2.0
Chromium VI, dissolved [3]	1.6	<1.5
Copper, dissolved	0.50	<0.46
Lead, dissolved	0.50	<0.43
Mercury, dissolved	1.0	<0.2
Nickel, dissolved	0.94	<0.5
Selenium, dissolved	2.0	<2.0
Silver, dissolved	0.20	<0.16
Thallium, dissolved	(2)	<2
Zinc, dissolved	3.6	<2
PESTICIDES / PCB'S		
Aldrin	0.05	<0.01
Chlordane	0.2	<0.082 [4]
Chlorpyrifos (synonym = Dursban)	(2)	<0.30
DDD	0.1	<0.01
DDE	0.1	<0.01
DDT	0.1	<0.01
Demeton	(2)	<0.50
Diazinon	(2)	<0.50
Dieldrin	0.1	<0.01
Alpha-Endosulfan	0.1	<0.01

CHEMICAL	REQUIRED QUANTIFICATION LEVEL [1]	REPORTED RESULTS (µg/L)
Beta-Endosulfan	0.1	<0.01
Endosulfan Sulfate	0.1	<0.01
Endrin	0.1	<0.01
Endrin Aldehyde	(2)	<0.0051
Guthion	(2)	<0.50
Heptachlor	0.05	<0.01
Heptachlor Epoxide	(2)	<0.01
Hexachlorocyclohexane Alpha-BHC	(2)	<0.01
Hexachlorocyclohexane Beta-BHC	(2)	<0.01
Hexachlorocyclohexane Gamma-BHC or Lindane	(2)	<0.01
Kepone	(2)	<0.01
Malathion	(2)	<0.50
Methoxychlor	(2)	<0.01
Mirex	(2)	<0.05
Parathion	(2)	<0.50
PCB Total	7.0	<3.57
Toxaphene	5.0	<0.51
BASE NEUTRAL EXTRACTABLES		
Acenaphthene	10.0	<5.0
Anthracene	10.0	<5.0
Benzidine	(2)	<50.0
Benzo (a) anthracene	10.0	<5.0
Benzo (b) fluoranthene	10.0	<5.0
Benzo (k) fluoranthene	10.0	<5.0
Benzo (a) pyrene	10.0	<5.0
Bis 2-Chloroethyl Ether	(2)	<5.0
Bis 2-Chloroisopropyl Ether	(2)	<5.0

CHEMICAL	REQUIRED QUANTIFICATION LEVEL [1]	REPORTED RESULTS (µg/L)
Butyl benzyl phthalate	10.0	<5.0
2-Chloronaphthalene	(2)	<5.0
Chrysene	10.0	<5.0
Dibenz(a,h)anthracene	20.0	<5.0
Dibutyl phthalate (synonym = Di-n-Butyl Phthalate)	10.0	<5.0
1,2-Dichlorobenzene	10.0	<5.0
1,3-Dichlorobenzene	10.0	<5.0
1,4-Dichlorobenzene	10.0	<5.0
3,3-Dichlorobenzidine	(2)	<25.0
Diethyl phthalate	10.0	<5.0
Bis-2-ethylhexyl phthalate	10.0	<5.0
Dimethyl phthalate	(2)	<5.0
2,4-Dinitrotoluene	10.0	<5.0
1,2-Diphenylhydrazine	(2)	<10.0
Fluoranthene	10.0	<5.0
Fluorene	10.0	<5.0
Hexachlorobenzene	(2)	<5.0
Hexachlorobutadiene	(2)	<5.0
Hexachlorocyclopentadiene	(2)	<10.0
Hexachloroethane	(2)	<10.0
Indeno(1,2,3-cd)pyrene	20.0	<5.0
Isophorone	10.0	<10.0
Nitrobenzene	10.0	<5.0
N-Nitrosodimethylamine	(2)	<5.0
N-Nitrosodi-n-propylamine	(2)	<5.0
N-Nitrosodiphenylamine	(2)	<10.0
Pyrene	10.0	<5.0

CHEMICAL	REQUIRED QUANTIFICATION LEVEL [1]	REPORTED RESULTS (µg/L)
1,2,4-Trichlorobenzene	10.0	<5.0
VOLATILES		
Acrolein	(2)	<100.0
Acrylonitrile	(2)	<100.0
Benzene	10.0	<5.0
Bromoform	10.0	<5.0
Carbon Tetrachloride	10.0	<5.0
Chlorobenzene (synonym = monochlorobenzene)	50.0	<5.0
Chlorodibromo methane	10.0	<5.0
Chloroform	10.0	<5.0
Dichloromethane (synonym = methylene chloride)	20.0	<5.0
Dichlorobromomethane	10.0	<5.0
1,2-Dichloroethane	10.0	<5.0
1,1-Dichloroethylene	10.0	<5.0
1,2-trans-dichloroethylene	(2)	<5.0
1,2-Dichloropropane	(2)	<5.0
1,3-Dichloropropene	(2)	<5.0
Ethylbenzene	10.0	<5.0
Methyl Bromide	(2)	<10.0
1,1,2,2-Tetrachloroethane	(2)	<5.0
Tetrachloroethylene	10.0	<5.0
Toluene	10.0	<5.0
1,1,2-Trichloroethane	(2)	<5.0
Trichloroethylene	10.0	<5.0
Vinyl Chloride	10.0	<10.0
ACID EXTRACTABLES		
2-Chlorophenol	10.0	<5.0

CHEMICAL	REQUIRED QUANTIFICATION LEVEL [1]	REPORTED RESULTS (µg/L)
2,4 Dichlorophenol	10.0	<5.0
2,4 Dimethylphenol	10.0	<10.0
2,4-Dinitrophenol	(2)	<50.0
2-Methyl-4,6-Dinitrophenol	(2)	<20.0
Nonylphenol	(2)	<10
Pentachlorophenol	50.0	<25.0
Phenol	10.0	<5.0
2,4,6-Trichlorophenol	10.0	<10.0
MISCELLANEOUS		
Ammonia as NH3-N	200	200
Chlorine Produced Oxidant	(2)	<100
Chlorine, Total Residual	100	<100
Cyanide, Free	10.0	<5 [5]
Enterococcus (N/CML)	(2)	21
Hydrogen Sulfide	(2)	<1000 [6]
Tributyltin	(2)	<30

FOOTNOTES:

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject TO change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

(2) The QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.

(3) Both Chromium III and Chromium VI may be measured by the total chromium analysis. If the result of the total chromium analysis is less than or equal to the lesser of the Chromium III or Chromium VI method QL, the results for both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(4) The permittee initially reported a censored concentration of <0.51 µg/L for chlordane, which is higher than the DEQ established QL of 0.2 µg/L. Upon further review, it was discovered that a transcription error occurred and that the laboratory, in fact, reported a concentration of <0.082 µg/L for chlordane to the permittee.

(5) The permittee initially reported a censored concentration of <50 µg/L for free cyanide, which is higher than the DEQ established QL of 10.0 µg/L. Upon further review, it was noted that an EPA approved test method for free cyanide does not exist. The permittee performed subsequent testing for total cyanide and reported a censored concentration of <5 µg/L. Free cyanide is a component of total cyanide. Therefore, it is inferred that free cyanide is less than the DEQ established QL of 10.0 µg/L.

(6) The permittee reported a censored concentration of <1000 µg/L for sulfide. Hydrogen sulfide is a component of sulfide. Therefore, it is inferred that hydrogen sulfide is less than the permittee established QL of 1000 µg/L.

Attachment H

MSTRANTI & STATS Analyses

MSTRANTI DATA SOURCE REPORT

VA0089231 – Lake Packing Company, Inc.

Stream Information	
Mean Hardness	Not applicable to saltwater discharges
90% Temperature (annual)	Calculated from data collected from monitoring station 1ACOA001.44
90% Temperature (winter)	Not applicable, a winter effluent tier has not been included in the permit
90% Maximum pH	Calculated from data collected from monitoring station 1ACOA001.44
10% Maximum pH	
Tier Designation	Flow Frequency Analysis
Tidal Zone	
Mean Salinity	Calculated from data collected from monitoring station 1ACOA001.44
Mixing Information	
Design Flow	Permit application, EPA Form 2C
Wasteload Allocation Multipliers	Stream Sanitation Analysis
Effluent Information	
Mean Hardness	Not applicable to saltwater discharges
90% Temperature (annual)	Calculated from data provided on monthly discharge monitoring reports.
90% Temperature (winter)	Not applicable, a winter effluent tier has not been included in the permit
90% Maximum pH	Calculated from data provided on monthly discharge monitoring reports.
10% Maximum pH	
Discharge Flow	Permit application, EPA Form 2C

SALTWATER AND TRANSITION ZONES
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Lake Packing Company, Inc. Permit No.: VA0089231 Version: OWP Guidance Memo 00-2011 (8/24/00)
Receiving Stream: Coan River

Stream Information		
Mean Hardness (as CaCO3) =	NA	mg/l
90th % Temperature (Annual) =	27.6	(° C)
90th % Temperature (Winter) =	NA	(° C)
90th % Maximum pH =	8.4	
10th % Maximum pH =	7.4	
Tier Designation (1 or 2) =	2	
Early Life Stages Present Y/N =	Y	
Tidal Zone =	1	(1 = saltwater, 2 = transition zone)
Mean Salinity =	12.5	(g/kg)

Mixing Information	
Design Flow (MGD)	0.029
Acute WLA multiplier	60
Chronic WLA multiplier	60
Human health WLA multiplier	60

Effluent Information		
Mean Hardness (as CaCO3) =	NA	mg/L
90 % Temperature (Annual) =	32.7	(° C)
90 % Temperature (Winter) =	NA	(° C)
90 % Maximum pH =	8.3	SU
10 % Maximum pH =	7.6	SU
Discharge Flow =	0.029	MGD

Parameter	Background	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			**Most Limiting Allocations**		
(ug/l unless noted)	Conc.	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	**Acute**	**Chronic**	**HH**
Acenapthene	0	--	--	9.9E+02	--	--	5.9E+04	--	--	9.9E+01	--	--	5.9E+03	**--**	**--**	**5.9E+03**
Acrolein	0	--	--	9.3E+00	--	--	5.6E+02	--	--	9.3E-01	--	--	5.6E+01	**--**	**--**	**5.6E+01**
Acrylonitrile [C]	0	--	--	2.5E+00	--	--	1.5E+02	--	--	2.5E-01	--	--	1.5E+01	**--**	**--**	**1.5E+01**
Aldrin [C]	0	1.3E+00	--	5.0E-04	7.8E+01	--	3.0E-02	3.3E-01	--	5.0E-05	2.0E+01	--	3.0E-03	**2.0E+01**	**--**	**3.0E-03**
Ammonia-N (mg/l) - Annual	0	#######	2.08E-01	--	8.30E+01	1.25E+01	--	3.46E-01	5.20E-02	--	2.08E+01	3.12E+00	--	**2.08E+01**	**3.12E+00**	**--**
Ammonia-N (mg/l) - Winter	0	#VALUE!	#VALUE!	--	#VALUE!	#VALUE!	--	#VALUE!	#VALUE!	--	#VALUE!	#VALUE!	--	**#VALUE!**	**#VALUE!**	**--**
Anthracene	0	--	--	4.0E+04	--	--	2.4E+06	--	--	4.0E+03	--	--	2.4E+05	**--**	**--**	**2.4E+05**
Antimony	0	--	--	6.4E+02	--	--	3.8E+04	--	--	6.4E+01	--	--	3.8E+03	**--**	**--**	**3.8E+03**
Arsenic	0	6.9E+01	3.6E+01	--	4.1E+03	2.2E+03	--	1.7E+01	9.0E+00	--	1.0E+03	5.4E+02	--	**1.0E+03**	**5.4E+02**	**--**
Benzene [C]	0	--	--	5.1E+02	--	--	3.1E+04	--	--	5.1E+01	--	--	3.1E+03	**--**	**--**	**3.1E+03**
Benzidine [C]	0	--	--	2.0E-03	--	--	1.2E-01	--	--	2.0E-04	--	--	1.2E-02	**--**	**--**	**1.2E-02**
Benzo (a) anthracene [C]	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
Benzo (b) fluoranthene [C]	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
Benzo (k) fluoranthene [C]	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
Benzo (a) pyrene [C]	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
Bis2-Chloroethyl Ether [C]	0	--	--	5.3E+00	--	--	3.2E+02	--	--	5.3E-01	--	--	3.2E+01	**--**	**--**	**3.2E+01**
Bis2-Chloroisopropyl Ether	0	--	--	6.5E+04	--	--	3.9E+06	--	--	6.5E+03	--	--	3.9E+05	**--**	**--**	**3.9E+05**
Bis2-Ethylhexyl Phthalate [C]	0	--	--	2.2E+01	--	--	1.3E+03	--	--	2.2E+00	--	--	1.3E+02	**--**	**--**	**1.3E+02**
Bromoform [C]	0	--	--	1.4E+03	--	--	8.4E+04	--	--	1.4E+02	--	--	8.4E+03	**--**	**--**	**8.4E+03**
Butylbenzylphthalate	0	--	--	1.9E+03	--	--	1.1E+05	--	--	1.9E+02	--	--	1.1E+04	**--**	**--**	**1.1E+04**
Cadmium	0	4.0E+01	8.8E+00	--	2.4E+03	5.3E+02	--	1.0E+01	2.2E+00	--	6.0E+02	1.3E+02	--	**6.0E+02**	**1.3E+02**	**--**
Carbon Tetrachloride [C]	0	--	--	1.6E+01	--	--	9.6E+02	--	--	1.6E+00	--	--	9.6E+01	**--**	**--**	**9.6E+01**
Chlordane [C]	0	9.0E-02	4.0E-03	8.1E-03	5.4E+00	2.4E-01	4.9E-01	2.3E-02	1.0E-03	8.1E-04	1.4E+00	6.0E-02	4.9E-02	**1.4E+00**	**6.0E-02**	**4.9E-02**

Parameter	Background	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			**Most Limiting Allocations**		
(ug/l unless noted)	Conc.	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	**Acute**	**Chronic**	**HH**
TRC	0			--			--	--	--	--	--	--	--	**--**	**--**	**--**
Chlorine Prod. Oxidant	0	1.3E+01	7.5E+00	--	7.8E+02	4.5E+02	--	3.3E+00	1.9E+00	--	2.0E+02	1.1E+02	--	**2.0E+02**	**1.1E+02**	**--**
Chlorobenzene	0	--	--	1.6E+03	--	--	9.6E+04	--	--	1.6E+02	--	--	9.6E+03	**--**	**--**	**9.6E+03**
Chlorodibromomethane[C]	0	--	--	1.3E+02	--	--	7.8E+03	--	--	1.3E+01	--	--	7.8E+02	**--**	**--**	**7.8E+02**
Chloroform	0	--	--	1.1E+04	--	--	6.6E+05	--	--	1.1E+03	--	--	6.6E+04	**--**	**--**	**6.6E+04**
2-Chloronaphthalene	0	--	--	1.6E+03	--	--	9.6E+04	--	--	1.6E+02	--	--	9.6E+03	**--**	**--**	**9.6E+03**
2-Chlorophenol	0	--	--	1.5E+02	--	--	9.0E+03	--	--	1.5E+01	--	--	9.0E+02	**--**	**--**	**9.0E+02**
Chlorpyrifos	0	1.1E-02	5.6E-03	--	6.6E-01	3.4E-01	--	2.8E-03	1.4E-03	--	1.7E-01	8.4E-02	--	**1.7E-01**	**8.4E-02**	**--**
Chromium III	0			--			--	--	--	--	--	--	--	**--**	**--**	**--**
Chromium VI	0	1.1E+03	5.0E+01	--	6.6E+04	3.0E+03	--	2.8E+02	1.3E+01	--	1.7E+04	7.5E+02	--	**1.7E+04**	**7.5E+02**	**--**
Chrysene [C]	0	--	--	1.8E-02	--	--	1.1E+00	--	--	1.8E-03	--	--	1.1E-01	**--**	**--**	**1.1E-01**
Copper	0	9.3E+00	6.0E+00	--	5.6E+02	3.6E+02	--	2.3E+00	1.5E+00	--	1.4E+02	9.0E+01	--	**1.4E+02**	**9.0E+01**	**--**
Cyanide, Free	0	1.0E+00	1.0E+00	1.6E+04	6.0E+01	6.0E+01	9.6E+05	2.5E-01	2.5E-01	1.6E+03	1.5E+01	1.5E+01	9.6E+04	**1.5E+01**	**1.5E+01**	**9.6E+04**
DDD [C]	0	--	--	3.1E-03	--	--	1.9E-01	--	--	3.1E-04	--	--	1.9E-02	**--**	**--**	**1.9E-02**
DDE [C]	0	--	--	2.2E-03	--	--	1.3E-01	--	--	2.2E-04	--	--	1.3E-02	**--**	**--**	**1.3E-02**
DDT [C]	0	1.3E-01	1.0E-03	2.2E-03	7.8E+00	6.0E-02	1.3E-01	3.3E-02	2.5E-04	2.2E-04	2.0E+00	1.5E-02	1.3E-02	**2.0E+00**	**1.5E-02**	**1.3E-02**
Demeton	0	--	1.0E-01	--	--	6.0E+00	--	--	2.5E-02	--	--	1.5E+00	--	**--**	**1.5E+00**	**--**
Diazinon	0	8.2E-01	8.2E-01	--	4.9E+01	4.9E+01	--	2.1E-01	2.1E-01	--	1.2E+01	1.2E+01	--	**1.2E+01**	**1.2E+01**	**--**
Dibenz(a,h)anthracene [C]	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
1,2-Dichlorobenzene	0	--	--	1.3E+03	--	--	7.8E+04	--	--	1.3E+02	--	--	7.8E+03	**--**	**--**	**7.8E+03**
1,3-Dichlorobenzene	0	--	--	9.6E+02	--	--	5.8E+04	--	--	9.6E+01	--	--	5.8E+03	**--**	**--**	**5.8E+03**
1,4-Dichlorobenzene	0	--	--	1.9E+02	--	--	1.1E+04	--	--	1.9E+01	--	--	1.1E+03	**--**	**--**	**1.1E+03**
3,3-Dichlorobenzidine[C]	0	--	--	2.8E-01	--	--	1.7E+01	--	--	2.8E-02	--	--	1.7E+00			
Dichlorobromomethane [C]	0	--	--	1.7E+02	--	--	1.0E+04	--	--	1.7E+01	--	--	1.0E+03	**--**	**--**	**1.0E+03**
1,2-Dichloroethane [C]	0	--	--	3.7E+02	--	--	2.2E+04	--	--	3.7E+01	--	--	2.2E+03	**--**	**--**	**2.2E+03**
1,1-Dichloroethylene	0	--	--	7.1E+03	--	--	4.3E+05	--	--	7.1E+02	--	--	4.3E+04	**--**	**--**	**4.3E+04**
1,2-trans-dichloroethylene	0	--	--	1.0E+04	--	--	6.0E+05	--	--	1.0E+03	--	--	6.0E+04	**--**	**--**	**6.0E+04**
2,4-Dichlorophenol	0	--	--	2.9E+02	--	--	1.7E+04	--	--	2.9E+01	--	--	1.7E+03	**--**	**--**	**1.7E+03**
1,2-Dichloropropane[C]	0	--	--	1.5E+02	--	--	9.0E+03	--	--	1.5E+01	--	--	9.0E+02	**--**	**--**	**9.0E+02**
1,3-Dichloropropene[C]	0	--	--	2.1E+02	--	--	1.3E+04	--	--	2.1E+01	--	--	1.3E+03	**--**	**--**	**1.3E+03**
Dieldrin [C]	0	7.1E-01	1.9E-03	5.4E-04	4.3E+01	1.1E-01	3.2E-02	1.8E-01	4.8E-04	5.4E-05	1.1E+01	2.9E-02	3.2E-03	**1.1E+01**	**2.9E-02**	**3.2E-03**
Diethyl Phthalate	0	--	--	4.4E+04	--	--	2.6E+06	--	--	4.4E+03	--	--	2.6E+05	**--**	**--**	**2.6E+05**
2,4-Dimethylphenol	0	--	--	8.5E+02	--	--	5.1E+04	--	--	8.5E+01	--	--	5.1E+03	**--**	**--**	**5.1E+03**
Dimethyl Phthalate	0	--	--	1.1E+06	--	--	6.6E+07	--	--	1.1E+05	--	--	6.6E+06	**--**	**--**	**6.6E+06**
Di-n-Butyl Phthalate	0	--	--	4.5E+03	--	--	2.7E+05	--	--	4.5E+02	--	--	2.7E+04	**--**	**--**	**2.7E+04**
2,4 Dinitrophenol	0	--	--	5.3E+03	--	--	3.2E+05	--	--	5.3E+02	--	--	3.2E+04	**--**	**--**	**3.2E+04**
2-Methyl-4,6-Dinitrophenol	0	--	--	2.8E+02	--	--	1.7E+04	--	--	2.8E+01	--	--	1.7E+03	**--**	**--**	**1.7E+03**
2,4-Dinitrotoluene [C]	0	--	--	3.4E+01	--	--	2.0E+03	--	--	3.4E+00	--	--	2.0E+02	**--**	**--**	**2.0E+02**
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	5.1E-08	--	--	3.1E-06	--	--	5.1E-09	--	--	3.1E-07	**--**	**--**	**3.1E-07**
1,2-Diphenylhydrazine[C]	0	--	--	2.0E+00	--	--	1.2E+02	--	--	2.0E-01	--	--	1.2E+01	**--**	**--**	**1.2E+01**
Alpha-Endosulfan	0	3.4E-02	8.7E-03	8.9E+01	2.0E+00	5.2E-01	5.3E+03	8.5E-03	2.2E-03	8.9E+00	5.1E-01	1.3E-01	5.3E+02	**5.1E-01**	**1.3E-01**	**5.3E+02**

Parameter	Background	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			**Most Limiting Allocations**		
(ug/l unless noted)	Conc.	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	**Acute**	**Chronic**	**HH**
Beta-Endosulfan	0	3.4E-02	8.7E-03	8.9E+01	2.0E+00	5.2E-01	5.3E+03	8.5E-03	2.2E-03	8.9E+00	5.1E-01	1.3E-01	5.3E+02	**5.1E-01**	**1.3E-01**	**5.3E+02**
Alpha + Beta Endosulfan	0	3.4E-02	8.7E-03	--	2.0E+00	5.2E-01	--	8.5E-03	2.2E-03	--	5.1E-01	1.3E-01	--	**5.1E-01**	**1.3E-01**	**--**
Endosulfan Sulfate	0	--	--	8.9E+01	--	--	5.3E+03	--	--	8.9E+00	--	--	5.3E+02	**--**	**--**	**5.3E+02**
Endrin	0	3.7E-02	2.3E-03	6.0E-02	2.2E+00	1.4E-01	3.6E+00	9.3E-03	5.8E-04	6.0E-03	5.6E-01	3.5E-02	3.6E-01	**5.6E-01**	**3.5E-02**	**3.6E-01**
Endrin Aldehyde	0	--	--	3.0E-01	--	--	1.8E+01	--	--	3.0E-02	--	--	1.8E+00	**--**	**--**	**1.8E+00**
Ethylbenzene	0	--	--	2.1E+03	--	--	1.3E+05	--	--	2.1E+02	--	--	1.3E+04	**--**	**--**	**1.3E+04**
Fluoranthene	0	--	--	1.4E+02	--	--	8.4E+03	--	--	1.4E+01	--	--	8.4E+02	**--**	**--**	**8.4E+02**
Fluorene	0	--	--	5.3E+03	--	--	3.2E+05	--	--	5.3E+02	--	--	3.2E+04	**--**	**--**	**3.2E+04**
Guthion	0	--	1.0E-02	--	--	6.0E-01	--	--	2.5E-03	--	--	1.5E-01	--	**--**	**1.5E-01**	**--**
Heptachlor [C]	0	5.3E-02	3.6E-03	7.9E-04	3.2E+00	2.2E-01	4.7E-02	1.3E-02	9.0E-04	7.9E-05	8.0E-01	5.4E-02	4.7E-03	**8.0E-01**	**5.4E-02**	**4.7E-03**
Heptachlor Epoxide[C]	0	5.3E-02	3.6E-03	3.9E-04	3.2E+00	2.2E-01	2.3E-02	1.3E-02	9.0E-04	3.9E-05	8.0E-01	5.4E-02	2.3E-03	**8.0E-01**	**5.4E-02**	**2.3E-03**
Hexachlorobenzene[C]	0	--	--	2.9E-03	--	--	1.7E-01	--	--	2.9E-04	--	--	1.7E-02	**--**	**--**	**1.7E-02**
Hexachlorobutadiene[C]	0	--	--	1.8E+02	--	--	1.1E+04	--	--	1.8E+01	--	--	1.1E+03	**--**	**--**	**1.1E+03**
Hexachlorocyclohexane Alpha-BHC[C]	0	--	--	4.9E-02	--	--	2.9E+00	--	--	4.9E-03	--	--	2.9E-01	**--**	**--**	**2.9E-01**
Hexachlorocyclohexane Beta-BHC[C]	0	--	--	1.7E-01	--	--	1.0E+01	--	--	1.7E-02	--	--	1.0E+00	**--**	**--**	**1.0E+00**
Hexachlorocyclohexane Gamma-BHC[C] (Lindane)	0	1.6E-01	--	1.8E+00	9.6E+00	--	1.1E+02	4.0E-02	--	1.8E-01	2.4E+00	--	1.1E+01	**2.4E+00**	**--**	**1.1E+01**
Hexachlorocyclopentadiene	0	--	--	1.1E+03	--	--	6.6E+04	--	--	1.1E+02	--	--	6.6E+03	**--**	**--**	**6.6E+03**
Hexachloroethane[C]	0	--	--	3.3E+01	--	--	2.0E+03	--	--	3.3E+00	--	--	2.0E+02	**--**	**--**	**2.0E+02**
Hydrogen Sulfide	0	--	2.0E+00	--	--	1.2E+02	--	--	5.0E-01	--	--	3.0E+01	--	**--**	**3.0E+01**	**--**
Indeno (1,2,3-cd) pyrene C	0	--	--	1.8E-01	--	--	1.1E+01	--	--	1.8E-02	--	--	1.1E+00	**--**	**--**	**1.1E+00**
Isophorone[C]	0	--	--	9.6E+03	--	--	5.8E+05	--	--	9.6E+02	--	--	5.8E+04	**--**	**--**	**5.8E+04**
Kepone	0	--	0.0E+00	--	--	0.0E+00	--	--	0.0E+00	--	--	0.0E+00	--	**--**	**0.0E+00**	**--**
Lead	0	2.4E+02	9.3E+00	--	1.4E+04	5.6E+02	--	6.0E+01	2.3E+00	--	3.6E+03	1.4E+02	--	**3.6E+03**	**1.4E+02**	**--**
Malathion	0	--	1.0E-01	--	--	6.0E+00	--	--	2.5E-02	--	--	1.5E+00	--	**--**	**1.5E+00**	**--**
Mercury	0	1.8E+00	9.4E-01	--	1.1E+02	5.6E+01	--	4.5E-01	2.4E-01	--	2.7E+01	1.4E+01	--	**2.7E+01**	**1.4E+01**	**--**
Methyl Bromide	0	--	--	1.5E+03	--	--	9.0E+04	--	--	1.5E+02	--	--	9.0E+03	**--**	**--**	**9.0E+03**
Methylene Chloride [C]	0	--	--	5.9E+03	--	--	3.5E+05	--	--	5.9E+02	--	--	3.5E+04	**--**	**--**	**3.5E+04**
Methoxychlor	0	--	3.0E-02	--	--	1.8E+00	--	--	7.5E-03	--	--	4.5E-01	--	**--**	**4.5E-01**	**--**
Mirex	0	--	0.0E+00	--	--	0.0E+00	--	--	0.0E+00	--	--	0.0E+00	--	**--**	**0.0E+00**	**--**
Nickel	0	7.4E+01	8.2E+00	4.6E+03	4.4E+03	4.9E+02	2.8E+05	1.9E+01	2.1E+00	4.6E+02	1.1E+03	1.2E+02	2.8E+04	**1.1E+03**	**1.2E+02**	**2.8E+04**
Nitrobenzene	0	--	--	6.9E+02	--	--	4.1E+04	--	--	6.9E+01	--	--	4.1E+03	**--**	**--**	**4.1E+03**
N-Nitrosodimethylamine[C]	0	--	--	3.0E+01	--	--	1.8E+03	--	--	3.0E+00	--	--	1.8E+02	**--**	**--**	**1.8E+02**
N-Nitrosodiphenylamine[C]	0	--	--	6.0E+01	--	--	3.6E+03	--	--	6.0E+00	--	--	3.6E+02	**--**	**--**	**3.6E+02**
N-Nitrosodi-n-propylamine[C]	0	--	--	5.1E+00	--	--	3.1E+02	--	--	5.1E-01	--	--	3.1E+01	**--**	**--**	**3.1E+01**
Nonylphenol	0	7.0E+00	1.7E+00	--	4.2E+02	1.0E+02	--	1.8E+00	4.3E-01	--	1.1E+02	2.6E+01	--	**1.1E+02**	**2.6E+01**	**--**
Parathion	0	--	--	--	--	--	--	--	--	--	--	--	--	**--**	**--**	**--**
PCB Total[C]	0	--	3.0E-02	6.4E-04	--	1.8E+00	3.8E-02	--	7.5E-03	6.4E-05	--	4.5E-01	3.8E-03	**--**	**4.5E-01**	**3.8E-03**
Pentachlorophenol [C]	0	1.3E+01	7.9E+00	3.0E+01	7.8E+02	4.7E+02	1.8E+03	3.3E+00	2.0E+00	3.0E+00	2.0E+02	1.2E+02	1.8E+02	**2.0E+02**	**1.2E+02**	**1.8E+02**

Parameter	Background	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			**Most Limiting Allocations**		
(ug/l unless noted)	Conc.	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	Acute	Chronic	HH	**Acute**	**Chronic**	**HH**
Phenol	0	--	--	8.6E+05	--	--	5.2E+07	--	--	8.6E+04	--	--	5.2E+06	**--**	**--**	**5.2E+06**
Phosphorus (Elemental)	0	--	1.0E-01	--	--	6.0E+00	--	--	2.5E-02	--	--	1.5E+00	--	**--**	**1.5E+00**	**--**
Pyrene	0	--	--	4.0E+03	--	--	2.4E+05	--	--	4.0E+02	--	--	2.4E+04	**--**	**--**	**2.4E+04**
Radionuclides	0	--	--	--	--	--	--	--	--	--	--	--	--	**--**	**--**	**--**
Beta and Photon Activity (mrem/yr)	0	--	--	4.0E+00	--	--	2.4E+02	--	--	4.0E-01	--	--	2.4E+01	**--**	**--**	**2.4E+01**
Selenium	0	2.9E+02	7.1E+01	4.2E+03	1.7E+04	4.3E+03	2.5E+05	7.3E+01	1.8E+01	4.2E+02	4.4E+03	1.1E+03	2.5E+04	**4.4E+03**	**1.1E+03**	**2.5E+04**
Silver	0	1.9E+00	--	--	1.1E+02	--	--	4.8E-01	--	--	2.9E+01	--	--	**2.9E+01**	**--**	**--**
1,1,2,2-Tetrachloroethane[C]	0	--	--	4.0E+01	--	--	2.4E+03	--	--	4.0E+00	--	--	2.4E+02	**--**	**--**	**2.4E+02**
Tetrachloroethylene[C]	0	--	--	3.3E+01	--	--	2.0E+03	--	--	3.3E+00	--	--	2.0E+02	**--**	**--**	**2.0E+02**
Thallium	0	--	--	4.7E-01	--	--	2.8E+01	--	--	4.7E-02	--	--	2.8E+00	**--**	**--**	**2.8E+00**
Toluene	0	--	--	6.0E+03	--	--	3.6E+05	--	--	6.0E+02	--	--	3.6E+04	**--**	**--**	**3.6E+04**
Toxaphene [C]	0	2.1E-01	2.0E-04	2.8E-03	1.3E+01	1.2E-02	1.7E-01	5.3E-02	5.0E-05	2.8E-04	3.2E+00	3.0E-03	1.7E-02	**3.2E+00**	**3.0E-03**	**1.7E-02**
Tributyltin	0	4.2E-01	7.4E-03	--	2.5E+01	4.4E-01	--	1.1E-01	1.9E-03	--	6.3E+00	1.1E-01	--	**6.3E+00**	**1.1E-01**	**--**
1,2,4-Trichlorobenzene	0	--	--	7.0E+01	--	--	4.2E+03	--	--	7.0E+00	--	--	4.2E+02	**--**	**--**	**4.2E+02**
1,1,2-Trichloroethane[C]	0	--	--	1.6E+02	--	--	9.6E+03	--	--	1.6E+01	--	--	9.6E+02	**--**	**--**	**9.6E+02**
Trichloroethylene [C]	0	--	--	3.0E+02	--	--	1.8E+04	--	--	3.0E+01	--	--	1.8E+03	**--**	**--**	**1.8E+03**
2,4,6-Trichlorophenol [C]	0	--	--	2.4E+01	--	--	1.4E+03	--	--	2.4E+00	--	--	1.4E+02	**--**	**--**	**1.4E+02**
Vinyl Chloride[C]	0	--	--	2.4E+01	--	--	1.4E+03	--	--	2.4E+00	--	--	1.4E+02	**--**	**--**	**1.4E+02**
Zinc	0	9.0E+01	8.1E+01	2.6E+04	5.4E+03	4.9E+03	1.6E+06	2.3E+01	2.0E+01	2.6E+03	1.4E+03	1.2E+03	1.6E+05	**1.4E+03**	**1.2E+03**	**1.6E+05**

Notes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
3. Metals measured as Dissolved, unless specified otherwise
4. "C" indicates a carcinogenic parameter
5. For transition zone waters, spreadsheet prints the lesser of the freshwater and saltwater water quality criteria.
6. Regular WLA = (WQC x WLA multiplier) - (WLA multiplier - 1)(background conc.)
7. Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
   = (0.1(WQC - background conc.) + background conc.) for human health
8. Antideg. WLA = (Antideg. Baseline)(WLA multiplier) - (WLA multiplier - 1)(background conc.)

Metal	Site Specific Target Value (SSTV)
Antimony	3.8E+03
Arsenic III	3.2E+02
Cadmium	7.9E+01
Chromium III	#VALUE!
Chromium VI	4.5E+02
Copper	5.4E+01
Lead	8.4E+01
Mercury	8.5E+00
Nickel	7.4E+01
Selenium	6.4E+02
Silver	1.1E+01
Zinc	5.4E+02

Note: do not use QL's lower than the minimum QL's provided in agency guidance

6/10/2011 10:28:56 AM

Facility = Lake Packing Company
Chemical = Ammonia as N
Chronic averaging period = 30
WLAa = 20.8 mg/l
WLAc = 3.12 mg/l
Q.L. = 0.1 mg/l
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = .2
Variance = .0144
C.V. = 0.6
97th percentile daily values = .486683
97th percentile 4 day average = .332758
97th percentile 30 day average= .241210
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are:

0.2 mg/l

Attachment I

Stream Sanitation Analysis Memo

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office

JAN 2 5 1996

4900 Cox Road Glen Allen, VA 23060 804/527-5020

SUBJECT: Proposed Effluent Limits for Lake Packing Co. Discharge

TO: Curt Linderman

FROM: D. X. Ren

DATE: January 4, 1996

Copies: Denise Mosca, Jon van Soestbergen, Technical Services, File

Purpose of Study:

Lake Packing in Northumberland County proposes to discharge to the Coan River (Rivermile: 1ACOA003.04, Lat/Long: 375818/0762812, WBID: A34, HUC:02070011), a tidal affected stream. This memo is to propose effluent limits for the subject discharge.

Site Inspection

I performed a site inspection with Denise Mosca of KRO on November 21, 1995. The owner, Mr. Lake Cowart and a consultant, Mr. John C. Barnes, Jr. of AMPRO Fisheries Company, were present during our site visit. The site visit confirmed the discharge point, which is located at the tidal affected segment of the Coan River. The tide at the discharge point is up to eighteen inches during the flood/ebb, twice daily. The proposed discharge flow is 0.031 MGD. No municipal wastewater is included. According to the calculation, the tide at the Coan River provides plenty of dilution capacity. The tidal dilution ratio could be much larger than 40000: 1.

Also, the wastewater comes from a food process of canning hominy. The proposed discharge consists of three types of discharges. The first is unused reverse osmosis water (3360 gallons/day). The second is food process and washup wastewater (10000 gallons/day). The third is cooling water (17250 gallons/day). The total discharge flow is 30610 (gallons/day), see Attachment #1. Only one of these three types of discharge contains BOD related pollutants, i.e, minor vegetable debris. The cooling water is containing a minor amount of salt. The cooling water is only pass-through river water without adding any chemicals. Based on the mass balance calculation, the mixed BOD_5 could be below 15 mg/l. The proposed discharge of 0.031 MGD may have a negligible impact on the stream water quality due to the daily tidal flushing.

The discharge runs to the Coan River directly. The river flow in the receiving stream is much higher than the discharge's flow. Based on the topographic measurement, the width of the Coan River at the discharge point is three tenths of a mile (about 1500 feet). The depth is up to 4 meters (about 12 feet). Regardless of daily tidal flushing, the river can provide as much as 6.6×10^4 times the dilution capacity of this discharge.

7Q10 Determination

For the fresh water 7Q10 determination, Paul Herman of Headquarters performed an analysis. The 7Q10 at the proposed discharge point was determined to be 0.078 MGD (0.12 cfs) in his memo (see Attachment #2).

Tier 2 Water

There are four Ambient Water Quality Monitoring Stations on Coan River: 1ACOA000.00, 1ACOA001.44, 1ACOA001.74, 1ACOA002.60, and 1ACOA004.24. Based on the STORET data for these stations, there was minor record for water quality violations. For example, at AQM station-1ACOA004.24, upstream of the proposed discharge, DO and pH violations were below 5%, i.e. 1 out of a total of 30 samples of DO and 1 out of a total of 29 of pH during the record period (from 73/05/04 to 76/09/28). Water quality violations of both parameters are much less than 10 %, which was considered to meet W.Q. standards. At AQM station-1ACOA002.60, downstream of the discharge, DO and pH violations looks similar. There are 2 out of a total of 29 samples of DO and 2 out of a total 28 of pH violations from record period from 92/10/27 to 94/12/15. Both violations are much less than 10%. Therefore, the receiving water was determined to be the Tier 2 Water.

Anti-degradation

Due to the Tier 2 Water determination, anti-degradation applies to the proposed discharge point. In the model, baseline establishment is needed, i.e. less than 0.2 mg/l of DO degradation is allowed at the DO sag in the model.

Modeling Approach

The Regional Tidal model was used for a tool to evaluate the impact of this discharge on the dissolved oxygen of the Creek. It showed that the discharge of conventional pollutants from the proposed discharge has no calculatable effect on the dissolved oxygen level of the Coan River.

Modeling Results

These effluent limits were determined based on Water Quality DO needs only. They didn't address the concerns for the public contact recreation needs. The following effluent limits are proposed:

Q= 0.031 MGD
$CBOD_5$ = 25.0 mg/l
TKN = Not Required
DO = 5.0 mg/l

Also, the ammonia WLAs for the chronic and acute will be determined based on OWRM Guideline Memorandum No. 93-015. Lake Packing Company is going to build a subsurface diffuser to meet the mixing zone requirement. It was documented separately in a memo from Dale Phillips of OWRM. The diffuser design determines the dilution ratio to be used for the calculation of ammonia WLAs

(see Attachment #3). Per Mike Gregory's memo of January 27, 1995, a temperature, pH and TSS limit are also recommended by OWRM in the absence of technology based guidelines for hominy (see Attachment #4). Other limits may be recommended by PRO water permits staff after further review of the application.

The computer printout, copy of topographic map, and schematic showing the discharge points are attached for your reference.

If you have any questions, please let me know.

DXR/Lake Packing4

Attachments

Attachment J

NPDES Permit Rating Work Sheet

NPDES PERMIT RATING WORK SHEET

NPDES No. VA0089231

☐Regular Addition
☐Discretionary Addition
☐Score change, but no status change
☐Deletion

Facility Name: Lake Packing Company, Inc.

County: Northumberland County

Receiving Water: Coan River

Reach Number: _____

Is this facility a steam electric power plant (SIC=4911) with one or more of the following characteristics?
1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate
☐ YES; score is 600 (stop here) ☒ NO (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

☐YES; score is 700 (stop here)
☒NO (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary SIC Code: 2033 Other SIC Codes: 2091
Industrial Subcategory Code: 005 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
☐No process waste streams	0	0	☐ 3.	3	15	☐ 7.	7	35
☒ 1.	1	5	☐ 4.	4	20	☐ 8.	8	40
☐2.	2	10	☐ 5.	5	25	☐ 9.	9	45
			☐6.	6	30	☐ 10.	10	50

Code Number Checked: 1

Total Points Factor 1: 5

FACTOR 2: Flow/Stream Flow Volume (*Complete either Section A or Section B; check only one)*

Section A ? Wastewater Flow Only Considered

Wastewater Type (See Instructions)		Code	Points
Type I: Flow < 5 MGD	☐	11	0
Flow 5 to 10 MGD	☐	12	10
Flow > 10 to 50 MGD	☐	13	20
Flow > 50 MGD	☐	14	30
Type II: Flow < 1 MGD	☒	21	10
Flow 1 to 5 MGD	☐	22	20
Flow > 5 to 10 MGD	☐	23	30
Flow > 10 MGD	☐	24	50
Type III: Flow < 1 MGD	☐	31	0
Flow 1 to 5 MGD	☐	32	10
Flow > 5 to 10 MGD	☐	33	20
Flow > 10 MGD	☐	34	30

Section B ? Wastewater and Stream Flow Considered

Wastewater Type (See Instructions)	Percent of instream Wastewater Concentration at Receiving Stream Low Flow		Code	Points
Type I/III:	< 10 %	☐	41	0
	10 % to < 50 %	☐	42	10
	> 50 %	☐	43	20
Type II:	< 10 %	☐	51	0
	10 % to <50 %	☐	52	20
	> 50 %	☒	53	30

Code Checked from Section A or B: 21

Total Points Factor 2: 10

FACTOR 3: Conventional Pollutants *(only when limited by the permit)*

A. Oxygen Demanding Pollutant: (check one) ☐ BOD ☐ COD ☒ Other: cBOD

			Code	*Points*
Permit Limits: (check one)	☒	< 100 lbs/day	1	0
	☐	100 to 1000 lbs/day	2	5
	☐	> 1000 to 3000 lbs/day	3	15
	☐	> 3000 lbs/day	4	20

Code Checked: 1

Points Scored: 0

B. Total Suspended Solids (TSS)

			Code	*Points*
Permit Limits: (check one)	☐	< 100 lbs/day	1	0
	☐	100 to 1000 lbs/day	2	5
	☐	> 1000 to 5000 lbs/day	3	15
	☐	> 5000 lbs/day	4	20

Code Checked: N/A

Points Scored: 0

C. Nitrogen Pollutant: (check one) ☐ Ammonia ☐ Other: _____

		Nitrogen Equivalent	*Code*	*Points*
Permit Limits: (check one)	☐	< 300 lbs/day	1	0
	☐	300 to 1000 lbs/day	2	5
	☐	> 1000 to 3000 lbs/day	3	15
	☐	> 3000 lbs/day	4	20

Code Checked: N/A

Points Scored: 0

Total Points Factor 3: 0

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

☐ YES (If yes, check toxicity potential number below)

☒ NO (If no, go to Factor 5)

Determine the *human health* toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column ? check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
☐ No process waste streams	0	0	☐ 3.	3	0	☐ 7.	7	15
☐ 1.	1	0	☐4.	4	0	☐ 8.	8	20
☐2.	2	0	☐5.	5	5	☐9.	9	25
			☐6.	6	10	☐ 10.	10	30

Code Number Checked: N/A

Total Points Factor 4: 0

FACTOR 5: Water Quality Factors

A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge:

		Code	Points
☒	Yes	1	10
☐	No	2	0

B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

		Code	Points
☒	Yes	1	0
☐	No	2	5

C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

		Code	Points
☐	Yes	1	10
☒	No	2	0

Code Number Checked: A: 1 B: 1 C: 2

Points Factor 5: A: 10 + B: 0 + C: 0 = 10 **Total**

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from Factor 2): 21 *Enter the multiplication factor that corresponds to the flow code:* 0.10

Check appropriate facility HPRI Code (from PCS):

	HPRI#	*Code*	*HPRI Score*
☐	1	1	20
☐	2	2	0
☒	3	3	30
☐	4	4	0
☐	5	5	20

HPRI code checked: 3

Flow Code	*Multiplication Factor*
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

Base Score: (HPRI Score) 30 X (Multiplication Factor) 0.10 = 3 (TOTAL POINTS A)

B. Additional Points ☐ *NEP Program*
For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

	Code	Points
☒ Yes	1	10
☐ No	2	0

C. Additional Points ☐ *Great Lakes Area of Concern*
For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see Instructions)

	Code	Points
☐ Yes	1	10
☒ No	2	0

Code Number Checked: A: 3 B: 1 C: 2

Points Factor 6: A: 3 + B: 10 + C: 0 = 13 **Total**

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	5
2	Flows/Streamflow Volume	10
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	10
6	Proximity to Near Coastal Waters	13
	TOTAL (Factors 1 through 6)	38

S1. Is the total score equal to or greater than 80? ☐ Yes (Facility is a major) ☒ No

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ No

☐ Yes (Add 500 points to the above score and provide reason below:

Reason:

NEW SCORE: 38
OLD SCORE: 38

Permit Reviewer's Name: Andrew Hammond

Permit Reviewer's Number: (804) 527-5048

Date: 6/13/2011

Attachment K

EPA Form 2C Sampling & Reporting Waiver

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office

4949–A Cox Road **Glen Allen, Virginia 23060** **(804) 527-5020**

TO: Curt Linderman, Water Permit Manager

FROM: Drew Hammond, Water Permit Writer

DATE: January 6, 2011 Revised February 14, 2011

SUBJECT: VA0089231 – Lake Packing Company, Inc.
Request for Application Testing Waiver

COPIES: File

Background Information:

Lake Packing Company, Inc. discharges industrial wastewater to the tidal Coan River (saltwater) in Northumberland County, Virginia. The facility cans, hominy, herring roe, clams, and conch for distribution and the discharge consists of non-contact retort water and reverse osmosis reject water. The volume of discharge generated is approximately 29,280 gpd. The 2006 VPDES permit expires on 7/9/2011. Process wastewater from the canning process is land applied under VPA01406, which is also issued by this office.

On 12/8/2010, DEQ received a 2011 permit reissuance application testing waiver request for COD, TOC, ammonia, winter temperature, nitrate-nitrite, organic nitrogen, phosphorus, and all Attachment A parameters from Lake Packing Company. In a letter dated 12/21/2011, DEQ denied the permittee's application testing waiver request and requested that all parameters be monitored for and reported. On 1/7/2011, DEQ received Lake Packing Company's 2011 permit reissuance application and the permittee has requested an application testing waiver for COD, TOC, and winter temperature. The aforementioned documents have been attached for reference.

A review of the permit files indicates that Lake Packing Company has not previously requested or been granted an application testing waiver.

Waiver Request: (as stated in the Lake Packing Company's waiver request letter)

1. "Form 2C, Section V, Part A.1.b, **COD**. In the 2005 application, the sample result was less than detection. Since then, no changes to the operation have taken place that would effect a change to the wastewater since that sample was taken. In addition, because there is no water quality limit for COD, this information should not be material to the completion of the draft permit."

2. "Form 2C, Section V, Part A.1.c, **TOC**. In the 2005 application, the sample result was extremely low (5.5. mg/l). An indication of the carbon present should be reflected in the $cBOD_5$ results we do have. These results have been running 1.0 mg/l or <1.0 mg/l on our quarterly DMRs for the past year, so current TOC concentrations may be assumed to be negligible. In addition, because there is no water quality limit for TOC, this information should not be material to the completion of the draft permit."

3. "Form 2C, Section V, Part A.1.g, **Winter Temperature**. A value of 20 degrees C was used in drafting the 2005 permit. This is an accurate estimate of what the winter temperature would be if we should

operate in the winter. We have not operated in the winter in the recent past, and have no plans to operate this winter and are thus unable to attain this figure."

Staff Comments:

1. The Virginia Water Quality Standards, 9VAC25-260, do not contain a numerical water quality criterion for COD. Additionally, COD effluent concentrations are not utilized to establish VPDES permit limitations. Therefore, the approval of this waiver will not impede the development of the 2011 draft permit by staff.

2. The Virginia Water Quality Standards, 9VAC25-260, do not contain a numerical water quality criterion for TOC. Also, TC effluent concentrations are not utilized to establish VPDES permit limitations. Therefore, the approval of this waiver will not prevent the development of the 2011 draft permit by staff.

3. The current VPDES permit does not contain a winter tier for Ammonia as Nitrogen. Additionally, the facility has not operated in the winter during the recent past, and the permittee has not requested a winter tier for Ammonia as Nitrogen to be added to the permit. Therefore, the approval of this waiver will not impede the development of the 2011 draft permit by staff.

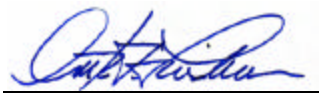
Staff Recommendation:

The staff recommends that this waiver be approved for the parameters of COD, TOC, and Winter Temperature for the 2012 permit reissuance only.

Management Concurrence:

Approved: ☒ Denied: ☐

As recommended.



Curtis J. Linderman, P.E.
Water Permit Manager

April 8, 2012
Date

w/ Attachments

LAPCO

Lake Packing Co., Inc.

755 Lake Landing Drive • Lottsburg, Virginia 22511

Telephone: 804-529-6101 Fax: 804-529-7374

December 6, 2010

Andrew J. Hammond II, P.E.
DEQ Piedmont Regional Office
4949-A Cox Road
Glen Allen, Va. 23601

RE: Lake Packing Company VPDES Permit Application VA0089231

Dear Mr. Hammond:
Lake Packing Company would like to request a waiver of some of the permit application requirements. Your notification of October 12, 2010 regarding the permit reissuance requirements occurred within days of our last discharge for the year (October 18, 2010) and we had no way to prepare for those requirements that went beyond those of the DMR. It is noted that the permit application for reissuance of our VPDES permit is due January 11, 2020. We don't anticipate operating and discharging until the spring and are unable to take additional samples until then. We hope this situation will be taken into account as well as the rationales given for waiving the following sampling requirements.

1. Form 2C, Section V Part A. 1. b. **COD**. In the 2005 application, the sample result was less than detection. Since then, no changes to the operation have taken place that would effect a change to the wastewater since that sample was taken. In addition, because there is no water quality limit for COD, this information should not be material to the completion of the draft permit.
2. Form 2C, Section V Part A. 1. c. **TOC**. In the 2005 application, the sample result was extremely low (5.5 mg/l). An indication of the carbon present should be reflected in the $CBOD_5$ results we do have. These results have been running 1.0 mg/l or <1.0 mg/l on our quarterly DMRs for the past year, so current TOC concentrations may be assumed to be negligible. In addition, because there is no water quality limit for TOC, this information should not be material to the completion of the draft permit.
3. Form 2C, Section V Part A. 1. e. **Ammonia** . The permittee has not been a significant discharger to the Chesapeake Bay as established in the 2005 permit. A diffuser is present on the outfall. During last permit reissuance, ammonia was not present in a sufficiently high concentration to warrant a limit. In addition, it is not expected to be a characteristic of the non-contact wastewater whose source is groundwater or the small (10 %) contribution from R.O. backwash.
4. Form 2C, Section V Part A. 1. g. **Winter Temperature** A value of 20 degrees C was used in drafting the 2005 permit. This is an accurate estimate of what the winter temperature would be if we should operate in the winter. We have not operated in the winter in the recent past, and have no plans to operate this winter and are thus unable to attain this figure.
5. Form 2C, Section V Part B. 1. f., g., and i. Nitrate-nitrite, organic nitrogen and phosphorus. These results in the 2005 permit application were <0.01 mg/l, 0.4 mg/l and 0.1 mg/l, respectively. The facility was far from qualifying as a significant discharger to the Chesapeake Bay during that permit cycle, and no changes to the operation have

taken place that would effect a change to the wastewater since then. In addition, these constituents are not expected to be a characteristic of the non-contact cooling wastewater whose source is groundwater or the small (10 %) contribution from R.O. backwash.

6. Water Quality Monitoring. Even though this facility's discharge does not exceed 40,000 gpd, the water quality monitoring was performed during the previous permit cycle and no items were identified that triggered a limit. No changes to the operation have taken place that would effect a change to the wastewater since those samples were taken; Lake Packing Company's discharge flow remains at 0.029 MGD .

Also, please be advised that the newspaper in general circulation in Northumberland County is the Northumberland Echo, not the Northern Neck News that you show on the Public Notice Billing Information form.
Thank you for your attention to this matter.

Sincerely,

S. Lake Cowart
President, Lake Packing Company, Inc.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

December 21, 2010

Mr. S. Lake Cowart, Jr., President
Lake Packing Company, Inc.
755 Lake Landing Drive
Lottsburg, Virginia 22511
Via E-Mail: cowartsales@gmail.com

Re: VPDES Permit No. VA0089231
Permit Reissuance Testing Waiver

Dear Mr. Cowart:

This is to advise you that your VPDES permit application testing waiver received on December 8, 2010, is hereby denied. Please monitor the facility's effluent for all EPA Form 2C Section V, Part A parameters as well as Nitrate-Nitrate, Total Organic Nitrogen, and Total Phosphorus contained within EPA Form 2C Section V, Part B. In addition to the sampling and monitoring requirements contained within EPA Form 2C, please monitor the facility's effluent for the parameters listed on "Attachment A – Water Quality Criteria Monitoring." An additional copy of Attachment A has been enclosed for your use.

As a reminder, a complete application for reissuance is due at least 180 days before a permit expires. In the event that a VPDES Permit expires as a result of failure to reapply in a timely manner, a facility may be considered as discharging without a valid VPDES permit

This letter is intended to provide information on what information DEQ believes is needed in order to fully evaluate your permit application and is not a final determination or case decision under the Administrative Process Act. If you would like to discuss the information contained in this letter, please contact me at (804) 527-5048. In the event that discussions with staff do not lead to a satisfactory resolution of the contents of this letter, you may elect to participate in DEQ's Process for Early Dispute Resolution. For information on the Process for Early Dispute Resolution, please visit the "Laws & Regulations", then the "DEQ Regulations" portion of our website for:

http://www.deq.virginia.gov/regulations/pdf/Process_for_Early_Dispute_Resolution_8260532.pdf

Please contact me at (804) 527-5048 or Andrew.Hammond@deq.virginia.gov if you have any questions about this letter.

Respectfully,

Andrew J. Hammond II, P.E.
Water Permit Writer

Enc: Attachment A – DEQ Water Quality Criteria Monitoring

Cc: Mr. Curtis J. Linderman, P.E., Water Permit Manager
Mr. Patrick Bishop, Compliance Auditor

LAPCO

Lake Packing Co., Inc.

755 Lake Landing Drive • Lottsburg, Virginia 22511

Telephone: 804-529-6101 **Fax: 804-529-7374**

January 4, 2011

Andrew J. Hammond II, P.E.
DEQ Piedmont Regional Office
4949-A Cox Road
Glen Allen, Va. 23601

RE: Lake Packing Company VPDES Permit Application VA0089231

Dear Mr. Hammond:

Attached please find the VPDES permit application for Lake Packing Company that is due January 10, 2011. If you recall, we applied for a waiver for the parameters we did not expect to be in our discharge because they were either shown in our last permit reissuance application and DMRs to be less than detection or less than an amount known to be of concern. The plant is closed down for the winter and will not operate until the spring. There is no chance of collecting a sample until that time should DEQ not approve our waiver request.

This permit is for the discharge of cooling water from the retorts in the hominy and herring roe canning processes, and a much smaller contribution from the reverse osmosis backwash. All hermetically sealed containers of canned product are thoroughly rinsed before entering the retorts (the rinse water is land applied). **This means that no matter what product is processed, the retort cooling water and the R.O. backwash will always have the same characteristics**. This is illustrated by the consistency of the data shown on our DMRs. Wastewater characteristics have not changed since the last permit reissuance. Thank you for continuing to discuss with us the basis for our waiver request. Please contact me at the number above or my agent, Denise Mosca, at dmosca@cox.net or 804-815-0661 if you have any additional questions.

Please also be advised that Lake Packing Co., Inc. also land applies wastewater under VPA01406 from raw product preparation, filling, liquid topping or brining, sealing/rinsing of finished container, and plant wash-up.

Thank you for your attention to this matter.

Sincerely,

S. Lake Cowart
President, Lake Packing Company, Inc.

Attachment L

Industrial Storm Water No Exposure Certification

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

April 9, 2012

S. Lake Cowart, Jr., President
Lake Packing Co., Inc.
755 Lake Landing Drive
Lottsburg, Virginia 22511

Re: No Exposure Certification – Lake Packing Co., Inc.
755 Lake Landing Drive, Lottsburg, Virginia 22511

Dear Mr. Cowart:

Please find enclosed a copy of the completed Virginia Department of Environmental Quality (DEQ) No Exposure Certification for Exclusion from Virginia Pollutant Discharge Elimination System (VPDES) Storm Water Permitting in response to your submittal received May 19, 2011. This certification constitutes notice that permit authorization is not required for storm water discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of "No Exposure" at the above referenced facility.

In accordance with the VPDES Permit Regulation (9VAC 25-31-120.E), to maintain eligibility for continued exclusion, you must submit a signed certification to DEQ no less frequently than once every five years. Consequently, this Certification is effective through May 18, 2016, provided the condition of no exposure continues to exist at this facility.

Should site conditions change and industrial activities or materials become exposed to precipitation that may result in a storm water discharge to waters of the Commonwealth, authorization under an individual or general VPDES permit may be required.

Please contact Drew Hammond at (804) 527-5048 or Andrew.Hammond@deq.virginia.gov if you have any questions.

Sincerely,

Curtis J. Linderman, P.E.
Water Permit Manager

Enclosure

VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES STORM WATER PERMITTING

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its storm water discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9 VAC 25-31-120 E (the VPDES Permit Regulation).

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. **Facility Operator Information**

   Name: Lake Packing Company, Inc.

   Mailing Address: 755 Lake Landing Dr.

   City: Lottsburg State: Va Zip: 22511 Phone: 804-529-6101

2. **Facility/Site Location Information**

   Facility Name: Lake Packing Company, Inc.

   Address: 755 Lake Landing Dr.

   City: Lottsburg State: Va Zip: 22511

   County Name: Northumberland

   Latitude: 37-58-20 Longitude: 076-28-09

3. **Was the facility or site previously covered under a VPDES storm water permit?** Yes ☒ No ☐

   If "Yes", enter the VPDES permit number: VAR051201

4. **SIC/Activity Codes:** Primary: 2033 Secondary (if applicable): 2091

5. **Total size of facility/site associated with industrial activity:** 10 acres

6. **Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion?** Yes ☐ No ☒

   If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

   Less than one acre ☐ One to five acres ☐ More than five acres ☐

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are <u>not</u> eligible for the No Exposure exclusion.**

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	☐	☒
(2) Materials or residuals on the ground or in storm water inlets from spill/leaks	☐	☒
(3) Materials or products from past industrial activity	☐	☒
(4) Material handling equipment (except adequately maintained vehicles)	☐	☒
(5) Materials or products during loading/unloading or transporting activities	☐	☒
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)	☐	☒
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐	☒
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐	☒
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐	☒
(10) Application or disposal of process wastewater (unless otherwise permitted)	☐	☒
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	☐	☒

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9 VAC 25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of storm water associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: S. Lake Cowart, Jr.

Print Title: President, Lake Packing Company, Inc.

Signature: S. Lake Cowart

Date: 5/18/11

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: A HAMMOND Date: 5/19/2011

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office

4949–A Cox Road **Glen Allen, Virginia 23060** **(804) 527-5020**

TO: Curt Linderman, Water Permit Manager

FROM: Drew Hammond, Water Permit Writer

DATE: November 4, 2011

SUBJECT: Lake Packing Co., Inc.
VPA Permit No. VPA01406; VPDES Permit No. VA0089231
Facility Site Visit

COPIES: File

Background

On Friday, February 11, 2011, Mike Dare and I met with S. Lake Cowart, Jr., President, of Lake Packing Co., Inc. This facility currently holds an individual Virginia Pollutant Abatement (VPA) permit and an individual Virginia Pollutant Discharge Elimination System (VPDES) permit for a minor, industrial facility. Lake Packing Co., Inc. is currently permitted (VPA01406) to land apply industrial wastewaters associated with the operation of a hominy, herring roe, fish bait, and clam/conch processing facility. The facility is also permitted (VPDES) to discharge industrial wastewaters (i.e. non-contact cooling water from the cooking retorts and reject water from its reverse osmosis unit) at Outfall 001.

Mr. Cowart provided a tour of the facility with regards to influent water treatment, effluent wastewater treatment, and materials handling/storage. Groundwater is pumped to the reverse osmosis unit for treatment prior to utilization. The treated groundwater is then used for filling during the canning process. Reject water from the reverse osmosis unit is discharged to the Coan River via a submerged diffuser (Outfall 001). After filling and sealing, canned products are then cooked in retorts. Non-contact cooling water from the retorts is also discharged to the Coan River at Outfall 001. Additional wastewaters generated during the canning and cooking process are routed through a solids separator for treatment. After treatment, the additional wastewater is land applied, via spray irrigation, to approximately 18 acres of Bermudagrass hay.

Raw products are either received fresh (fish and herring roe) prior to processing or are stored under roof cover in warehouses. The facility's processing equipment is wholly located under roof cover with the exception of the fish receiving hopper, the solids separator, and the land application wastewater holding tank. It is noted that the facility does not operate when land application is unacceptable (i.e. during rainfall events); therefore, eliminating the potential for contaminated storm water runoff from these three areas. Final products are stored under roof cover in freezers and/or warehouses. Solid waste generated is stored in a covered dumpster and is picked up regularly by Doggett Disposal Company. At the time of our visit, the site appeared clean with little or no solids accumulation.

It is noted that Cowart Seafood Corp. is located immediately adjacent to Lake Packing Company. Mr. Cowart is also the President of this corporation. Cowart Seafood currently holds a General VPDES Permit for Seafood Processing Facilities (VAG524048). Cowart Seafood is required to develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) in accordance with 9 VAC 25-115-50 Part II. A certification of no exposure is not being requested for this facility.

Recommendation

DEQ staff recommends the acceptance of Lake Packing Company's certification of no exposure. The site appears to be well-maintained with facility operations located under roof cover including materials handling and storage. The facility does not operate during rainfall events; therefore, effectively eliminating the potential for storm water exposure to industrial activities.

Attachment M

Owner Comments & DEQ Staff Responses

Cowart Seafood Corp.
755 Lake Landing Drive
Lottsburg, VA 22511

Telephone: 804-529-6101 **Toll Free: 800-324-3759** **Fax: 804-529-7374**

Andrew J. Hammond II, P.E.
DEQ Piedmont Regional Office
4949-A Cox Road
Glen Allen, Va. 23060

RE: VPDES Draft Permit VA0089231 and Supporting Documentation– Lake Packing Company

Dear Drew:

In response to your letter of May 3, 2012 transmitting the subject draft permit for review, we are submitting the following comments. We would like to see these issues resolved prior to public notice.

1. Special Condition I.B.3.b. Monthly Average. The last sentence of that paragraph specifies how a monthly average shall be calculated for a quarterly parameter. The Daily Maximum paragraph doesn't have that language, and refers to "reporting month" several times. DEQ should clarify this paragraph as well. We suggest changing "reporting month" to "reporting period."
2. Special Condition I.B.8. The draft permit as written requires that a CER approved by DEQ is required for treatment works construction as well as having a professional engineer approve that the as-built facility was constructed in accordance with what was submitted to and approved by DEQ. It is noted that this is not a state-wide requirement, and would unfairly serve to decrease operational flexibility, and increase expenses for small business. Guidance memo 93-030, which still appears to be current, applies the requirement for CERs to significant dischargers and does not require approval by a P.E. The discharge from Lake Packing Company is seasonal, intermittent, infrequent and consists of cooling water with a component of R.O. reject water. Analyses show that it is absent or virtually absent of toxics, nutrients, CBOD and solids and has a pH range of 7.6 to 8.2 S.U., and a temperature range of 26.7 to 34.4 degrees C. It clearly is not the type of discharge that would be fitting the requirement for a CER under GM 93-030, and Lake Packing Company requests that this condition be removed from the draft permit. Additionally, there is a typo in the second to last sentence of this condition (relive-->relieve).

If you have any questions, please do not hesitate to contact us.

Sincerely,

S. Lake Cowart, Jr.
President

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

May 16, 2012

Mr. S. Lake Cowart, Jr., President
Lake Packing Co., Inc.
755 Lake Landing Drive
Lottsburg, Virginia 22511
Via E-Mail: cowartsales@gmail.com

Re: Lake Packing Co., Inc.
VPDES Permit No. VA0089231
Response to Owner Comments

Dear Mr. Cowart:

The staff of Virginia's Department of Environmental Quality (DEQ) has reviewed your comments received May 14, 2012, in regards to draft Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0089231. Staff offers the following responses:

1. Part I.B.3.b (Daily Maximum) of the draft VPDES permit has been revised to include the following language, "For monitoring frequencies encompassing multiple months, the daily maximum value to be reported on the DMR shall be the maximum of the arithmetic daily averages calculated for each calendar day during the monitoring period." Staff believes that this additional language clarifies the daily maximum DMR reporting requirements for effluent parameters with monitoring frequencies encompassing multiple calendar months (i.e. "1 per 3 Months").

2. Section 62.1-44.16 of State Water Control Law states in part, "Any owner who erects, constructs, opens, expands or employs new processes in or operates any establishment from which there is a potential or actual discharge of industrial wastes or other wastes to state waters shall first provide facilities approved by the Board for the treatment or control of such industrial wastes or other wastes. Application for such discharge shall be made to the Board and shall be accompanied by pertinent plans, specifications, maps, and such other relevant information as may be required, in scope and details satisfactory to the Board." Part I.B.8 (Concept Engineering Report) of the draft VPDES permit serves to execute the aforementioned section of State Water Control Law regardless of facility size and/or industrial permit rating. Consequently, staff believes Part I.B.8's inclusion in the draft VPDES permit is warranted and does not appear to limit facility day-to-day operations.

   Please note that the written completion notification shall be certified by a professional engineer or signed in accordance with Part II.K of the permit. As a result, staff believes that the proposed special condition does not appear to unjustly increase small business expenses. Also, the typographical error has been corrected; thank you for brining this to our attention.

This letter is not a final determination or case decision under the Administrative Process Act. If you would like to discuss the information contained in this letter, please contact me at (804) 527-5048. In the event that discussions with staff do not lead to a satisfactory resolution of the contents of this letter, you may elect to participate in DEQ's Process for Early Dispute Resolution. For information on the Process for Early Dispute Resolution, please visit the following address:

http://townhall.virginia.gov/L/GetFile.cfm?File=E:\townhall\docroot\GuidanceDocs\440\GDoc_DEQ_2672_v1.pdf

I plan to contact the newspaper no later than **May 24, 2012**, to publish the public notice. You may submit comments prior to publishing the public notice and through the 30-day public comment period. Please contact me at (804) 527-5048 or Andrew.Hammond@deq.virginia.gov if you have any questions about this letter.

Respectfully,

Andrew J. Hammond II, P.E., H.I.T.
Water Permit Writer

Enc: Draft Permit – Revised
Comment Letter – Copy (received 5/14/2012)

Cc: Ms. Denise Mosca, Owner's Agent

LAPCO

Lake Packing Co., Inc.

755 Lake Landing Drive • Lottsburg, Virginia 22511

Telephone: 804-529-6101 **Fax: 804-529-7374**

May 18, 2012

Dear Mr. Paylor:

My purpose in writing this letter is to continue contesting the inclusion of a special condition in the VPDES draft permit VA0089231 recently sent to me and to make you aware of water permitting decisions in the Piedmont Region leading to a burden on small business without improvement to water quality. I would further request a meeting with you and your staff to resolve this issue.

Lake Packing Co., Inc. (LPC) is located in Northumberland County in the Northern Neck of Va. and cans hominy and herring roe for distribution. The 0.029 MGD discharge from LPC is seasonal, intermittent, infrequent and consists of cooling water from the cooking retorts (autoclaves) and reject (brine) water from the reverse osmosis unit. Analyses show that it is absent or virtually absent of toxics, nutrients, CBOD and solids and has a pH range of 7.6 to 8.2 S.U., and a temperature range of 26.7 to 34.4 deg. C. The discharge is to the Coan River, which is a salt water receiving stream.

At issue is the requirement for a special condition for submittal of a Conceptual Engineering Report (CER) for DEQ approval prior to constructing any wastewater treatment works. Guidance Memo 93-030, which is current, applies the requirement for CERs to significant dischargers. Although LPC's discharge is clearly is not the type that would be fitting the requirement for a CER under GM 93-030, PRO – Water Permits staff has responded in a letter dated May 16, 2012 that the CER special condition of the draft VPDES permit serves to execute Section 62.1-44.16 of State Water Control Law which is without regard to facility size and/or industrial permit rating. Consequently, DEQ staff believes the CER condition's inclusion in the draft VPDES permit is warranted and does not appear to limit facility day-to-day operations.

It is noted that because PRO – Water Permits staff is deviating from GM 93-030, the CER requirement appears to be applied unequally in the Piedmont Region compared to other regions across the state and creating an unfair business advantage. The draft permit fact sheet is incomplete without an explanation why GM 93-030 is not being followed. Contrary to what PRO – Water Permits staff believes, the CER requirement further serves to decrease operational flexibility, and increases expenses for small business. In today's business climate, LPC depends on the ability to move quickly if necessary to can different available products to keep their equipment in use and their employees at work. Because the discharge consists of the cooling water and R.O. water, the wastewater characteristics do not change regardless of product canned, and LPC is willing to inform DEQ of any changes at the plant.

Waiting for DEQ approval prior to executing operational changes that include wastewater collection at the plant, however, introduces an unacceptable lag period during which LPC is not able to can product.

LPC believes that in following GM 93-030 in every region, DEQ would fairly implement the intent of GM 93-030 and focus permitting staff time and resources on significant dischargers which produce the greatest impacts to water quality. Small business would not be unfairly burdened without a corresponding improvement to water quality. This strategy of putting greater focus on significant dischargers is already being implemented in other DEQ programs, such as inspections.

Please respond with you and your staff's availability so that we may set up a meeting to conclude this issue.

Sincerely,

S. Lake Cowart
President, LPC

Cc: Delegate Margaret Ransone
Melanie D. Davenport, DEQ Water Division Director
Fred Cunningham, DEQ Office of VPDES Permits and Compliance
Michael Murphy, DEQ - PRO Regional Director
Curt Linderman, P.E., DEQ - PRO Water Permit Manager
Andrew J. Hammond, II, P.E., DEQ – PRO Water Permit Writer